				DEPARTME	NT OF N	OF UTAH ATURAL R GAS AND		ES .		AN	F MENDED REP	FORM 3	
		APPL	ICATION FOR	PERMIT TO DRILL					1. WELL N	IAME and NUMBE	<b>R</b> 01H-02-11-1	5	
2. TYPE O		DRILL NEW WELL (	REENTER P&	A WELL DEEPE	N WELL				3. FIELD (	OR WILDCAT	ESIGNATED		
4. TYPE O		Gas V		ped Methane Well: NO	,				5. UNIT o	COMMUNITIZAT	ION AGREE	MENT NA	ME
6. NAME C	F OPERATOR	Od3 v							7. OPERA	TOR PHONE			
8. ADDRES	SS OF OPERATOR	<b>?</b>	XTO ENER	RGY INC					9. OPERA	TOR E-MAIL	333-3145		
40 MINED	AL LEASE NUMB		82 Road 3100, A	ztec, NM, 87410	Dellin				42 CUDE	Kelly_Kard	os@xtoenerç	gy.com	
	., INDIAN, OR STA			-	NDIAN [	STAT	E FI	EE 💭	FEDERA		STAT	re 📵 f	FEE 🔵
13. NAME	OF SURFACE O	WNER (if box 12 = 'fo	ee')						14. SURF	ACE OWNER PHO	ONE (if box	12 = 'fee')	
15. ADDRI	ESS OF SURFACE	E OWNER (if box 12	= 'fee')						16. SURF	ACE OWNER E-M	IAIL (if box	12 = 'fee')	
	ALLOTTEE OR ' = 'INDIAN')	TRIBE NAME		18. INTEND TO CON MULTIPLE FORMATI YES (Submit	IONS	PRODUCT		i Io 📵	19. SLAN		ONAL (	HORIZON	TAL 📵
20. LOCA	TION OF WELL		FC	OOTAGES	Q	TR-QTR	s	ECTION	тоу	VNSHIP	RANGE	м	ERIDIAN
LOCATIO	N AT SURFACE		769 FI	NL 566 FEL		NENE		2	1;	ı ş s	15.0 E		S
Top of U	ppermost Produ	cing Zone	1591 F	NL 656 FEL		SENE		2		.0 S	15.0 E		S
At Total	Depth		1491 FI	NL 1245 FEL		SENE	T	110	1	1.0 S	15.0 E		S
21. COUN		DUCHESNE		22. DISTANCE TO N	EAREST L	LEASE LINI	(Feet	75	23. NUMB	ER OF ACRES IN	DRILLING U	INIT	
				25. DISTANCE TO NE (Applied For Drillin	EAREST V g or Com		ME PO		26. PROP	OSED DEPTH MD: 2030	9 TVD: 1	4326	
27. ELEV <i>A</i>	TION - GROUND	<b>LEVEL</b> 6916		28. BOND NUMBER	4312 762	2&UTB000	38			CE OF DRILLING GHTS APPROVAL Comr			BLE
				Hole Casin	g, and	Cement I	nformatio	on					
String	Hole Size	Casing Size	Length	Weight		& Threa	d	Max M		Cement	Sacks	Yield	Weight
Cond	17.5	13.375	0 - 5000	48.0		40 ST&C 80 LT&C		9.	-	Class G	450 505	1.15 3.82	15.8
Suri	12.23	9.625	0 - 3000	40.0	IN-	OU LIAC		9.	.0	Type V Class G	210	1.15	15.8
I1	7	8.5	0 - 14150	32.0	Q-125 C	Casing/Tu	bing	12	0	Type V	400	2.75	11.6
							<u> </u>			50/50 Poz	320	1.62	13.0
L1	4.5	6	0 - 20309	15.1	P-1	10 Other		14	.5	Class G	565	1.27	16.2
					ATTAC	HMENTS							
	VERIF	Y THE FOLLOWII	NG ARE ATTA	CHED IN ACCORDA	ANCE W	ITH THE (	JTAH OIL	. AND GAS	CONSER	VATION GENE	RAL RULE	s	
<b>⊯</b> wi	ELL PLAT OR MAI	P PREPARED BY LICI	ENSED SURVEYO	R OR ENGINEER		<b>∠</b> c	OMPLETE	DRILLING P	LAN				
AF!	FIDAVIT OF STAT	US OF SURFACE OW	NER AGREEMEN	IT (IF FEE SURFACE)		FC	RM 5. IF C	PERATOR I	S OTHER T	HAN THE LEASE	OWNER		
DIF	RECTIONAL SURV	/EY PLAN (IF DIREC	TIONALLY OR HO	DRIZONTALLY DRILLE	ED)	<b>№</b> то	POGRAPI	HICAL MAP					
NAME Kr	ista Wilson		TITLE Permitt	ting Tech		<u>.                                      </u>	PHONE 5	05 333-364	7				
SIGNATU	RE		<b>DATE</b> 11/19/	2010			EMAIL kri	ista_wilson@	xtoenergy	.com			
API NUME	BER ASSIGNED 4	3013504900000	1	APPROVAL									

#### Drilling Plan - Production Pilot Hole & Cement Plug Sidetrack w/Single Long Lateral in Mancos Shale

#### Well Name and Location

Bad Land Cliffs 01H-02-11-15

Surface Location: 769' FNL & 566' FEL, NE NE Sec 02- T11S - R15E

Bottom H. Location (Pilot): Same as Above

Bottom H. Location (Sidetrack): 1491' FNL & 1245' FEL, SE NE Sec 11 - T11S - R15E

Elevation: Un-graded Pad 6916', Estimated KB = 6935'

Duchesne County, UT

## **Driving Directions**

Directions to Well: Proceed in a southwesterly direction from Myton, UT along U.S. Highway 40 approximately 1.5 miles to the junction of this road and sand wash road to the south; turn left and proceed in southerly and then southwesterly, then southerly direction approximately 1.7 miles to the junction of this road and the 9 mile road to the southwest; turn right and proceed in a southwesterly direction approximately 23.6 miles to the junction of this road and an existing road to the southeast; at the divide, at the top of Gate Canyon turn left and proceed in a southeasterly direction approximately 1.1 miles to the beginning of the proposed access road for the BLC #13-02-11-15 to the northeast.; follow road flags in a northeasterly direction approximately 0.25 miles to the proposed (staked) location 11-02 and then 0.5 miles to the proposed location (Note: Total Distance from Myton, UT to the proposed well location is approximately 27 miles).

#### **Drilling Rig Description**

1200 HP Minimum Top Drive Rig (Undesignated at this time) Rig Type: 1200 HP Minimum Input Rating (Undesignated at this lime) **Draw Works** Undesignated Rig – Mast of Selected Rig will accommodate 3 joints DP Mast Prime Movers Undesignated Rig at this point in time Selected Rig will have Triplexes with main am 1000 input HP ratings 11" Minimum Size Diameter of Lage 10000 psi Double Gate BOP 11" Minimum Size Diameter of Lager 5000 psi Annular BOP 3" Min OD x 10,000 psi c Oce manifold Pumps **BOPE** 

#### **Formation Tops** Hole Loc. MD of Sidetrack Hole TVD of S/T Hole

Green River	1,321		
"Birds Nest" Member	1,773'	· ·	
Mahogany Bench Marker	2,125'		
Wasatch Tongue	4,097'		
Green River Tongue	4,610'		
Wasatch	4,777'		
Mesaverde	9,100'		
Castlegate	11,696'		
Blackhawk	11,967'		
Mancos	12,885'	12887'	
Mancos "B"	12,977'	12982'	
Mancos "B" Base	13,368'	13385'	
Top of Mancos Target Zone	14,492'	14234'	14,220'
Base of Mancos Target Zone	14,916'	14831'	14,644'
Total Depth of the Pilot / S.T. Hole	15,000'	20309'	14,326'

(Note: Depths of Sidetracked Wellbore are in a 5° updip position with reference to the Surface Location Coordinates)

#### Estimated Depths of Anticipated Water, Oil, Gas, or Minerals

<u>Formation</u>	<u>Depth</u>	<u>Type</u>
Wasatch Tongue	4,097'	Oil/Water
Wasatch	4,777'	Gas/Water
Mesaverde	9,100'	Gas
Mancos	12,885'	Gas
Mancos "B"	12,977'	Gas

Maximum Anticipated BHP: Based on a review of the closest offsets (Gasco GCS 23-16-11-15 & Petro-Canada Rye Patch Fed 24-21), the Maximum Mud Density Requirements were 12.1# MWE. A conservative pore pressure estimate for this well is 14.0 ppg. Therefore M.A. BHP = (.052) (14.0) (15000) = 10920 psi.

Max Anticipated Surf Pressure (MASP – assuming a dry column of gas to surface): [10920 – (15000)(0.1)] = 9420 psi.

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#### Logging, DST and Coring Program

- 1. Mud Logging Services to be initiated from + 2000 ft to TD, and the sidetracked horizontal wellbore which includes sample cuttings taken at +15' intervals in the vertical wellbore and +30' intervals in the horizontal hole. After the vertical pilot hole reached total depth of ~15,000', a Spectral GR-SP-Resistivity-Neutron-Density Log will be performed from TD back to the surface shoe at +5000'. Optional logs that may be run at these same intervals include a Sonic Scanner, FMI, and ECS suite. A USIT CBL/GR log will be performed from the top of the 4-1/2" Liner (+ 13,700' MD/TVD) to the surface shoe depth (±5000'). A MWD/GR/ROP log will also be performed from KOP to the final TD of the horizontal lateral.
- 2. No DST's are planned at this time.

#### H<sub>2</sub>S

Based on previous penetrations in the offsets Gasco GCS 23-16-11-15 and the Petro-Canada Rye Patch Fed 24-21, presence of H<sub>2</sub>S is not anticipated. If encountered, RU H<sub>2</sub>S safety trailer, etc.

### BOP Equipment Requirements (See attached diagram detailing BOPE specifications)

- 1. Rig will be equipped with upper and lower Kelly cocks with handles available
- 2. Inside BOP & TIH valves will be available to use on all sizes and threads of drill pipe used on well.
- BOP Accumulator will have enough capacity to close the HCR valve, close all rams plus to annular preventer and retain a minimum of 200 psi above pre-charge on the closing man following man without the use of closing pumps. The fluid reservoir capacity shall be at least doub the iseable fluid volume of the accumulator system capacity and the fluid level shall be maintained at the manufacturer's recommendation. There will be 2 additional sources of power to power the closing pumps (electric and air). Sufficient N<sub>2</sub> bottles will be available and with perecharged when pressure falls below the manufacturer's minimum.
- falls below the manufacturer's minimum.
  BOP Ram preventers will be tested to 10,000 psi using a test plug when initially installed & after 7 inch casing is nippled up, and @ 30 day intervals. The Annular Preventer will initially be tested to 70% of the rated WP (0.7 \* 5000 psi) = 3500 psi and on subsequent test 50% or 2500 psi per the same time schedule. The casing string test values prior to shoe drill-out are: 13-3/8 1 psi/ft string depth = 500 psi, 9-5/8 70% of I. Yield of Casing 4000 psi, and 7" 70% of I. Yield of Casing 10000 psi Function test rams and hydraulically operated remote choke line valve every crew change. Blind Rams function tested once per day if operations permit.
  Remote Valve for BOP rams. ICC and Choke shall be positioned in a location that is readily handy to the Driller. The remote BOP valve shall be capable of closing and opening the rams.
  Hand wheels on BOP shall be equipped with locking devices. A locking device shall be placed on the annular preventer line valve, and must be locked in the open position. This lock shall only be removed when the closing unit is inoperative.
- removes when the closing unit is inoperative.

## rilling Flujd and Related Equipment

- Pumps shall be equipped with stroke counters with displays located in dog house. The slow pump speed shall be recorded on drilling report daily after mudding up.
- A Pit Volume Totalizer will be installed and the readout will be displayed in the doghouse.
- Gas detecting equipment (for a chromatograph) will be installed at shaker. Readouts will be available in dog house and in geologist trailer.
- In the event gas flow becomes an issue: A flare pit shall be constructed not less that 100 feet from the wellhead and 50' from the active mud system tanks. Lines to the flare pit will be straight runs (staked down) and turns (if necessary) will utilize targeted tees a minimum of 50' from the wellhead. Flare pit will be located down wind as much as possible. An electronic igniter will be used along with a propane line to provide for a continuous flare pilot.
- 5. Prior to conversion to the oil based mud to drill below the 7" Intermediate Shoe, Drip Pans shall be installed below the rotary beams on the substructure of the drilling rig.
- For the portion of the hole drilled with OBM, drying shaker and cuttings tank will be installed downstream from the tandem shakers.
- 7. For the portion of the hole drilled with oil based mud, mud vacuums shall be maintained and utilized on the rig floor to keep the rig clean.
- A plastic liner shall be installed beneath the steel mud circulating tanks, and associated tandem shaker, drying shaker, and temporary cuttings storage tank.
- 9. A plastic liner shall be installed beneath the 500 bbl storage tank for oil based mud cuttings.
- 10. The oil based mud storage tanks shall be located on a plastic liner and bermed for spill prevention.
- 11. Any surface location that the drilling mud could possibly come in contact with will be lined including load-out and transport areas. These areas will have a perimeter berm or excavated catch trench.

#### **Drilling Plan**

Section 1 - Conductor Casing>> Conductor to: 500 (Conductor Casing Depth)

Structural: 20" pipe set @ +40' w/26" Bucket -Dry Drilled (Augared) & set w/Redi-Mix

Hole Size: 17.5" OD Fluid System: Air-Mist

Bits: Air Hammer Bit - 17-1/2" OD

Procedure Drill to Conductor casing setting depth plus necessary rat hole. Run casing and

Pressure Control: NU a 20" diverter stack with outlets to divert flow from rig floor to blow pit. The

Diverter System will provide a means of well control consistent with the 20" structural casing depth. Function test valves on the diverter stack prior to

initiating the drilling process.

13-3/8", 48 lb/ft, H-40, ST&C Casing: Set at: +/- 500 ft

Centralizers: 2 centralizers on the first 2 joints including the shoe joint, and one

in the upper part of the hole to centralize the pipe

Cement: One Slurry Design 450 Sacks

Class G plus CaCl 2% and 1/4#/sk Celloflake. Mixed @ ~4.97 gps wtr, 1.15 cf/sx

yield and 15.8 ppg

Top Out Cmt: If needed a Class "G" type will be used (~1.15 CF / sx) to bring to surface

Note: Volumes based on 50% excess. Final Cement Design may vary from above

depending on actual hole conditions and parameters

Section 2 - Surface Casings

to 5000' g Depth) Surface (Su

Conductor: 13-3/8" Cond. set @ + 500' (depending on any grave) Cmt'd to surface

Hole Size: 12-1/4" OD

Fluid System: LSND Spud Mud with a Mud Density of about

Bits: Tricone Mill Tooth (12-1/4" OD)

Procedure

Set 9-5/8" Surface Pipe +200' below the to on the Wasatch Formation

Drill to casing setting depth plus necessary Rat Hole. Run casing and cement. Weld on slip-over brade the div 13 5/8", 5m casing head. NU X-O drilling spool back to 13-5/8 10,000 by lange

Press. Control: NU 10m BOPE. Test to 10,000 PSI. Annular Preventer to be tested to 3500 psi.

9-5/8", 40 lb/ft N-80, 8rd ST&C, R3, Seamless Set at: 5,000 ft Casing:

Minimum of Contralizers on the bottom 3 joints of casing starting with shoe joint Centralizers:

Cement: Surry 505 Sacks

Type V plus 16% high yield add, 3% Salt, 10#/sx LCM, 1/4#/sk Celloflake.

Mixed @ ~23.0 gps wtr, 3.82 cf/sx yield and 11.0 ppg

210 Sacks

Class G plus 2% CaCl and 1/4#/sk Celloflake. Mixed @ 5.0 gps wtr, 1.15 cf/sx

yield and 15.8 ppg

Note: Volumes calculated assuming 40% excess. Final Cement Design may vary from above design depending on actual hole conditions and parameters.

Section 3 - From Surface Shoe to 15000' MD/TVD (Pilot Hole to define Formation Tops/Markers)

Hole Size: 8-1/2" OD

Fluid System: KCI / Polymer FW Mud with maximum mud density of 12.5 ppg.

Bits: PDC bits with Mud Motors

Procedure: Drill with PDC bit and motor making trips as necessary. Take inclination surveys

a minimum of every 500 feet during the vertical section. Hold surveys to 5 deg

maximum deviation.

Logs: Mud Logger will start below the surface pipe.

Minimum Spectral GR - SP / Resistivity / Neutron - Density Log to be run at TD

back to Surface Shoe Depth

Section 4 - Plug Pilot Hole Back to 13,600' by Cement Plug, and S/Trk & Drill First Build Section to 20-3/4° Angle @ 14,150' MD, 14.142' TVD. Set and Cement 7" Intermediate Casing String.

8-1/2" OD Hole Size:

Fluid System: KCI / Polymer FW Mud with anticipated Maximum MW Requirement of 12.5 ppg

Bits: PDC with Mud Motors and MWD

Procedure: After logging operations complete, RIH with O/Ended DP to + 14,100'

Mix and Pump a balanced cement plug and place from ~ 14.100' - 13.600' After WOC, RIH and dress cement to a hard top @ + 13,800'. POOH.

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#### **Drilling Plan – Section 4 (Continued)**

Procedure: PU directional tools, RIH & time drill to sidetrack around cement plug. Build

> angle to 20-3/4° inclination along 186.5° azimuth to 12,867' MD/12,859' TVD. 7", 32 lb/ft, Q-125, FJ Conn., R3, Seamless casing at 14,150 ft MD/14,142' TVD

Casing: Centralizers: Minimum of 3 centralizers on the bottom 3 joints of casing starting with shoe joint

S/Track Plug Cement: 260 Sacks

Class 'G' plus 0.75% Friction Reducer & other additives needed as per hole

condtions. Mixed @ ~3.78 gps wtr, 0.99 cf/sx yield and 17.0 ppg

Notes: Plug Volume calculated assuming 30% excess. Final Cement Design may vary from above design depending on actual hole conditions & parameters. If caliper log is available, volumes may be calculated based on log caliper + 15% excess. The Cement Plug-Back and Sidetrack Depth is an estimate only, and may vary according to the actual location of the formation tops as drilled

7" Cmt Design: **Lead** Slurry 400 Sacks

> Econocem <sup>™</sup> Type V plus 16% high yield additive & 1/8#/sk Polymer flakes with other trademark additives. Mixed @ ~15.6 gps wtr, 2.75 cf/sx yield and 11.6 ppg

320 Sacks

Extendacem <sup>™</sup> 50 / 50 Poz/"G" Cement plus 6% Gel & 1/8#/sk Polymer flakes with other trademark additives - Mixed @ 8.0 gps wtr, 1.62 cf/sx yield & 13.0 ppg

Note: Volumes calculated assuming 30% excess, Final Cement Design ma from above design depending actual hole conditions & parameters, log is available, volumes may be calculated based on log caliper 15% excess. Top of Lead calculated back to 4500' (500 above the Surface Shoe). After the cement is mixed and pumped, the distract nent will be implemented with an Oil-Base Mud to humo the Cement Bish accement Plug in the Float with an Oil-Base Mud to bump the Cement acement Plug in the Float Collar. The initial OBM density will in the 10.5 - 11.0 ppg range.

#### Section 5- Drill Lwr. Tang. Curve (6° /100') >14150' MD/14142 515387' MD/14775' TVD (Heel of Lateral)

Hole Size: 6" OD

Invert – 80% Diesel 20% vater phase, M.Weight 11.0 – 13.0 ppg, ES: ~600-800 PDC with Max Motors and MWD for the "Angle Hold" Portion of the Curve Fluid System: Bits:

10m BORE Re Test to 10,000 PSI. Annular Preventer to be tested to 5000 psi. Press Control: After dumping the Water Base Mud from the Steel Pits to the Lined Reserve Pit, Procedure:

clean thoroughly including all Flow Lines & Associated Valving Active Tanks with OBM and Activate the Oil Cuttings Drying System PU 6" Tri-Cone, Drill Float Collar, Test 7" Casing, Drill F.Shoe, and ~15 ft 6" open hole

Conduct an FIT test on the 7" Shoe.

Drill lower tangent curve per directional plan (maximum survey interval is 90') to the heel of the lateral at 15387' MD/14755TVD utilizing a Build-Up Rate of 6°/100' while maintaining an azimuth of 186.5° to a final target inclination of 95°.

Section 6 - Drill Horizontal Lateral >>15387' MD/14775' TVD To 20309'MD/14326'TVD (Run 4-1/2" Liner) 6" OD

Hole Size:

Fluid System:

Bits: Procedure:

etu

Invert – 80% Diesel/20% water phase, M.Weight 13.5 – 14.5 ppg, ES: ~600-800

PDC with Mud Motors and MWD (with possible LWD – GR)

Drill the 6" OD lateral section as per directional plan to total depth of target. Maximum Survey Interval is 90'. (Note: Logging tools with GR may be run with Directional MWD tools contingent on quality of drill cuttings as evaluated by site Mud Loggers). Circulate and condition hole for liner run. POOH with DP and directional tools. Run a 4-1/2", 15.1 ppf, P-110, Specialty FJ Conn Liner with Liner Hanger Packer and PBR to total depth. Set liner hanger, and cement as per cement design below. After the completion of the cement job, un-sting from the

liner, and reverse out any residual cement.

Liner Shoe: Liner Top: +13,850 ±20,309

Cement: One Slurry Design 565 Sacks

> Class "G" with Friction Reducer Additive + Sand Weighting Additive + Retarder + Fluid Loss Agent + Defoamer. Slurry to be Mixed @ ~5.0 gps wtr, 1.27 cf/sx

yield and 16.2 ppg Density

#### Section 6 – Continued – Cementing the 4-1/2" Liner

Note: Volumes calculated assuming 25% excess. Final Cement Design will vary from above design once actual hole conditions & parameters are determined, but should reflect approximate properties of the above general

design

Finalize Well >>>> POOH and LDDP

ND BOP. NU a 7-1/16", 10m psi tapped blanking flange with nipple and valve

Completion Operations will follow at a later date

### Water Supply:

No water pipelines will be laid for this well

- No water well will be drilled for this well
- Drilling Water for this well will be hauled on the road(s) shown in Attachment No.
- Water will be hauled from either:
  - An Approved Water Provider with Valid Current Permit with given Source of the Duckesne or a parove River in Myton City. Utah
  - Myton City Water Provider with Valid Current Permit

### **Anticipated Starting Date and Duration of the Operations:**

Starting Date: March 1st, 2011

eturned

Duration: 4 Months

#### CASING PROGRAM SUMMARY (Shell Model Utilized - Maximum Loss of 1/3 of Mud Column to Shoe Depth)

Surface Casing: 9.625" casing to be set at  $\pm 5000$ ' in a 12-1/4" hole filled with 9.0 ppg mud

Interval	Length	Wt	Gr	Cplg	Collapse Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
0'-5000'	5000'	40.0#	N-80	LT&C	3090	5780	737	8.835	8.679	1.37	2.15	3.69

Casing Design used takes Bi-Axial Stresses into account.

Burst Calculated with 14.4 ppg FG @ shoe (review of offset data). Calculated Surface Pressure = 2990 psi and Corrected Burst Rating @ the top of 6418 psi. Burst Safety Factor Shown is at Weakest Point at the surface. Collapse Calculated with Full Evacuation of Casing and Corrected Collapse Rating of the Pipe at the Shoe of 3201 psi. Tensile Safety Calculated Absent of any Buoyancy Effects

7" casing to be set ±14,150'MD/14,142'TVD in 8-1/2" hole filled w/12.0 ppg mud Intermediate Casing:

					Collapse Rating	Burst Rating	Jt Str	ID	Drift	SF 	SF	SF
Interval	Length	Wt	Gr	Cplg	(psi)	(psi)	(M-lbs)	(in)		Goll	Burst	Ten
0'-14,150'	14,150'	32.0#	Q-125	FJ Spec	11710	14160	1165	6.094	6.00	1.44	1.25	2.57

Casing Design used takes Bi-Axial Stresses into account.

Casing Design used takes Bi-Axial Stresses into account.

Burst Calculated with Estimated 20.7 FG @ shoe. Maximum Surface Pressure During Practure Stimulation = 12,500 Back-Up Pore Pressure = 9.50 ppg. Corrected Burst Rating at the Top = 16 310 psi. Safety Factor for Burst Shown at Weakest Point @ 7" Shoe (During Fracture Stimulation Operations with Screen Out Pressures) cture Stimulation = 12,500 psi. 810 psi. Safety Factor for Burst is Shown at Weakest Point @ 7" Shoe (During Fracture Stimulation Or Calculated with Full Evacuation of Casing and Corrected Raining of Pi Collapse Calculated with Full Evacuation of Casing and Corrected R at the Shoe of 12,429 psi

Tensile Safety Factor Calculated Absent of any Buoyancy Effective

Production Liner: 4.5" liner to be set at 10 (±20,309' MD) in 6.0" hole filled with 14.5 ppg mud.

Interval	Length	Wt	C	Cplg	Collaps. Rating (psi)	Burst Rating (psi)	Jt Str (M-lbs)	ID (in)	Drift (in)	SF Coll	SF Burst	SF Ten
13,850'- 20,309'	6459	15.1#	P-110	FJ Spec	14320	14420	485	3.826	3.701	1.31	1.31	4.97

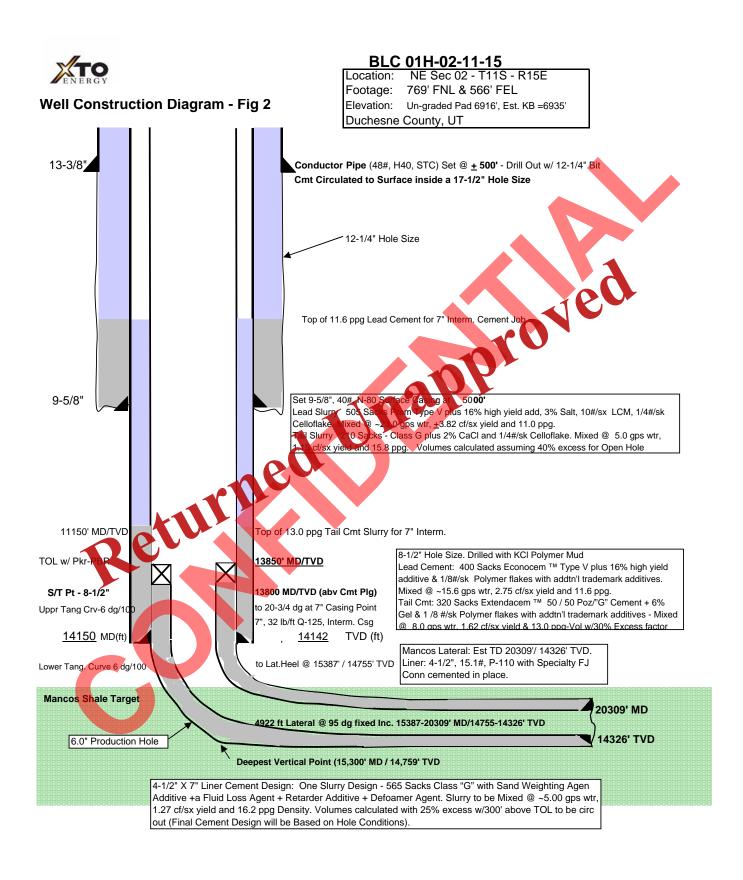
to use Makes Bi-Axial Stresses into account. Deepest Point in Lateral Section = 14,759' TVD.

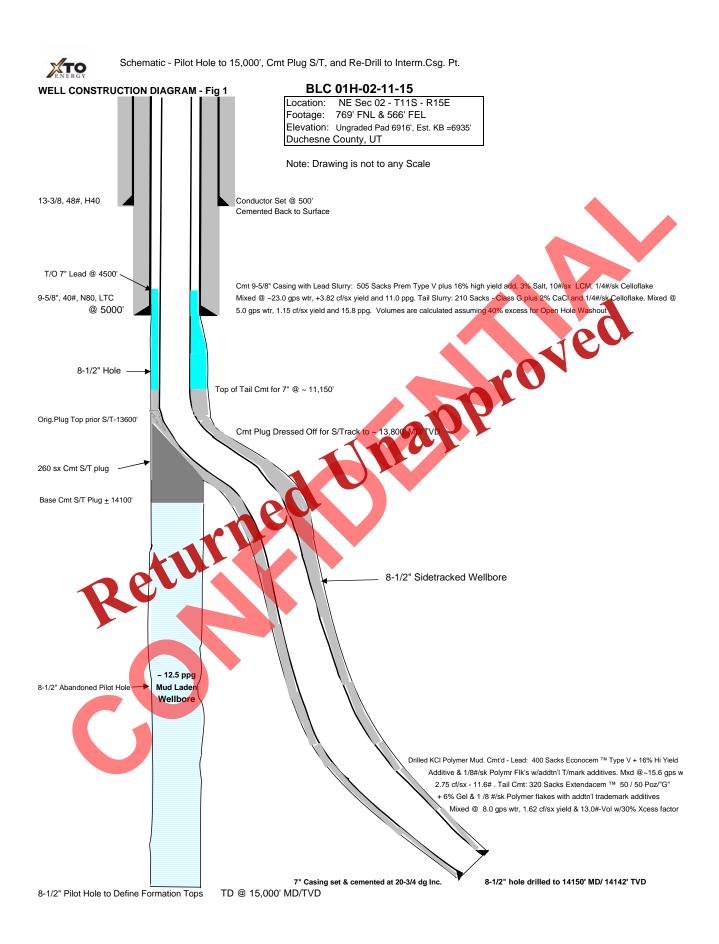
The country of th Pressure across Liner = 9.5 ppg. Corrected Burst Rating at the Shoe of Liner = 15563 psi. Safety Factor for Burst is Shown at Weakest Point @ Liner Shoe (During Frac Stimulation with Maximum Screen-Out Pressure). Collapse Factor Calculated with Full Evacuation of Casing, and Corrected Collapse Rating of Pipe @ Liner Shoe = 14568 psi.

Tensile Safety Factor Calculated Absent of any Buoyancy Effects

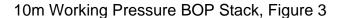
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Ssg - "Special Drift."



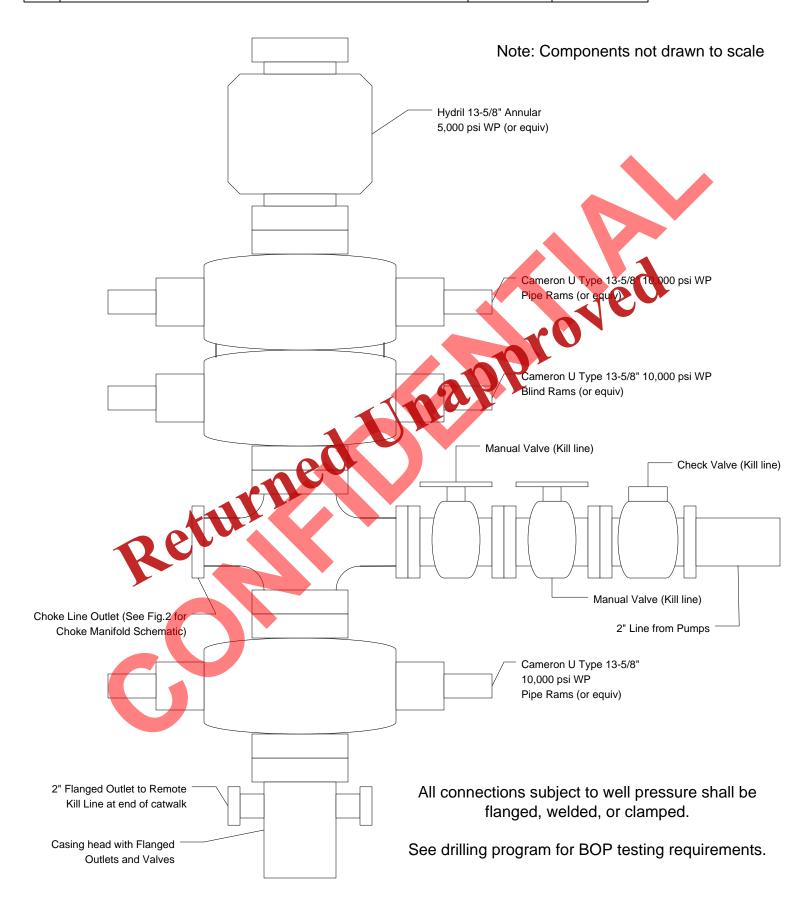


## **XTO Energy, Inc**



11/8/2010 | Rig- Undesgn



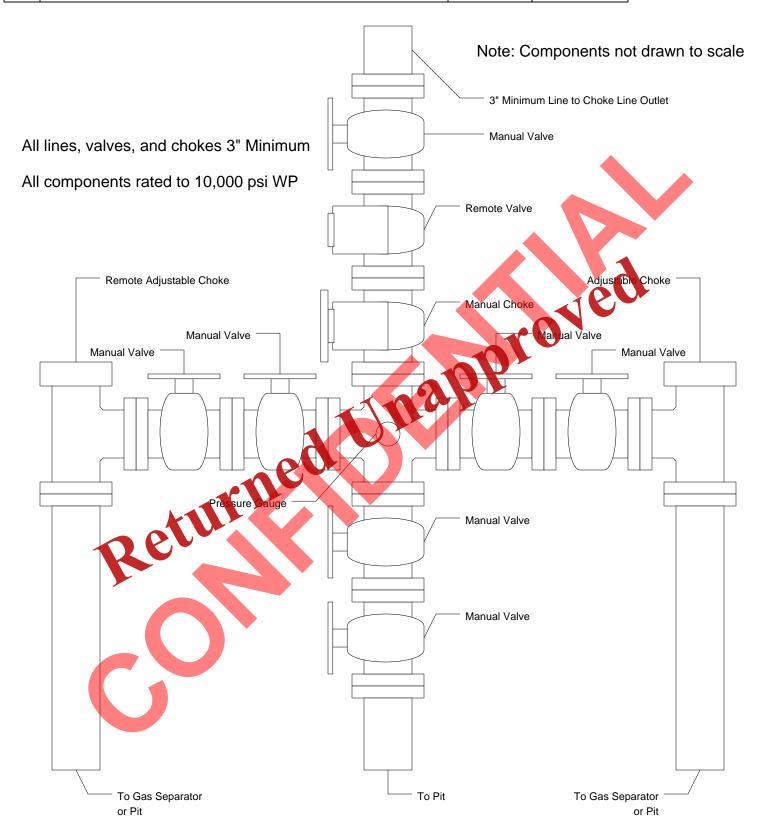


## **XTO Energy, Inc**

10m Working Pressure Choke Manifold, Figure 4

11/8/2010 | Rig Undesgn





All connections subject to well pressure shall be flanged, welded, or clamped.

See drilling program for BOP testing requirements.

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## SURFACE USE PLAN

XTO Energy Inc.

BLC 01H-02-11-15

769' FNL x 566' FEL

Section 02, T11S, R15E

Duchesne County, Utah

#### TWELVE POINT SURFACE USE PLAN

The dirt contractor will be provided with an approved copy of the surface use plan of operations before initiating construction.

#### 1. Existing Roads:

- a. Proposed route to location is shown on the USGS quadrangle hap:

  See Exhibit "A".
- b. The Proposed Well Location is approximately 27.05 miles from Myton, UT
- c. Location of proposed well in relation to lown prother reference point:

  Proceed in a Southwesterly direction from Myton, Utah along U.S. Highway 40 approximately 1.5 miles to the junction of this road and Sand wash Road to the South. Turn left and proceed in a southerly, then southwesterly, then southerly direction approximately 1.7 miles to the junction of this road and the 9 Mile Road to the southwest. Turn Right and proceed in a southwesterly direction approximately 23.6 miles to the junction of this road and an existing road to the southeast. Turn left and proceed in a southwesterly direction approximately 1.1 miles to the beginning of the proposed access road for the BLC #13-02-11-15 to the northeast. Follow the road flags in a northeasterly direction, approximately 0.15 miles to the beginning of the proposed access road for the BLC # 11-02-11-15 to the northeast. Follow the road flags in a northeasterly direction approximately 0.5 miles to the beginning of the proposed access road to the northeast. Follow the road flags in a northeasterly direction approximately 0.7 miles to the proposed location.
- d. All existing roads within 1 mile of the drill site are shown on Exhibit "A". If necessary, all existing roads that will be used for access to the well location will be maintained to their current condition or better unless SITLA approval or consent is given to upgrade the existing road(s).
- e. The use of roads under State and County Road Department maintenance are necessary to access the Bad Lands Cliff area. However, an encroachment permit is not anticipated since no upgrades to the State or County Road system are proposed at this time.
- f. All existing roads will be maintained and kept in good repair during all phases of the operation.

### 2. Planned Access Roads:

- a. Location (centerline): Starting from a point along an existing road in the NE/4 of Sec 10, T11S, R15E.
- b. Length of new access to be constructed: Approx 4,288 feet (0.7 miles) of new access will be constructed in order to gain safe access to the well pad.
   Approximately 0.65 miles of access has already been approved with the BLC 11-02-11-15 APD. See Exhibit "B"
- c. Length of existing roads to be upgraded: None
- d. SITLA approval to construct and utilize the proposed access road is requested with this application.
- e. Maximum total disturbed width: For this particular project, both existing roads and new access roads could require up to 55' of disturbed width in order to obtain a 20' driving surface. If both the road and pipelite are capable of sharing the ROW, then only 65' of disturbed width may be needed.
- f. Maximum travel surface width: 25' or less
- g. Maximum grades: Maximum grades will not exceed 10% after construction.
- h. Turnouts: No turnouts are planned at this time. Turnouts may be specified in the approved APD
- i. Surface materials: Only native materials will be used during construction. If necessary, glavel or rock maybe purchased and used to improve road conditions and travel.
- j. Drainage (crowning, ditching, culverts, etc): Roads will be crowned and bar ditches will be located along either side. 18-24" dia CMP culverts will be installed as necessary.
- k. Cattle guards: No cattle guards are planned at this time. Cattle guards will be specified in the stipulations if necessary.
- Vehicle operators will obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions.
- Length of new and/or existing roads which lie outside the lease or unit boundary for which a BLM/state/fee right-of-way is required: **None**
- Other: See general information below.

Surface disturbance and vehicular travel will be limited to the approved location and access road only. Any additional surface area needed must be approved by SITLA in advance.

All access roads and surface disturbance will conform to the standards outlined in the BLM and Forest Service publication: <u>The Gold Book, Surface Operating Standards for Oil</u> and Gas Exploration and Development. (2007).

The operator will be responsible for all maintenance of the access road including drainage structures.

If any additional right-of-way is necessary, no surface disturbing activities shall take place on the subject right-of-way until the associated APD is approved. The holder will adhere to all conditions of approval in the Surface Use Program and of the approved APD, relevant to any right-of way.

If at any time, the facilities located on state lands authorized by the terms of the lease are no longer included in the lease (due to contraction in the unit or other lease or unit boundary change) the State will process a change in authorization to the appropriate statue.

If the well is production, the access road will be rehabilitated as needed and brought to Resource (Class III) Road Standards within a time period specified by SITLA. If upgraded, the access road must be maintained at these standards until the well is properly abandoned.

3. <u>Location of Existing Wells</u> within a one mile radius of the proposed well "See Exhibit C"

### 4. <u>Location of Production Facilities</u>:

a. On-site facilities: Typical on-site facilities will consist of a wellhead, flow lines (typ 3" dia.), artificial lifting system (if necessary), wellhead compression (if necessary), gas/oil/water separator (3 phase), gas measurement and water measurement equipment, and a heated enclosure/building for weather and environmental protection. The tank battery will typically be constructed and surrounded by a perp of sufficient capacity to contain 1½ times the storage capacity of the largest tank(s). The tanks typically necessary for the production of this well will be 1 – 300 bbl steel, above ground tank for oil/condensate and 1 – 300 bbl steel, tank for produced water. All loading lines and valves for these tanks will be placed inside the berm surrounding the tank battery.

All oil/condensate production and measurement shall conform to the provisions of 43 CFR § 3162.7 and Onshore Oil and Gas Order No. 4, if applicable. Other on-site equipment and system may include methanol injection and winter weather protection.

All permanent (in place for six months or longer) structures constructed or installed on the well site location will be painted a flat, non-reflective color to match the standard environmental colors, as specified by the COA's in the APD. All facilities will be painted within six months of installation. Facilities required by comply with the Occupational Safety and Health Act (OSHA) may be excluded.

- b. Off-site facilities: N/A
- c. Pipelines: The well will be produced into a 20" or less buried steel gas pipeline and 12" or less poly or flex steel (depending on pressures) water pipeline and transported to either an existing pipeline ROW (3<sup>rd</sup> party transporter) or gas gathering facility. See Exhibit "D" for the proposed pipeline route.
- d. Power lines: There are no plans to include power lines in this application. In the event power is required, a ROW application will be submitted to the

appropriate agencies.

5. <u>Location and Type of Water Supply:</u>

Water will be purchased from a commercial water source and trucked via third party to the location over approved access roads.

6. Source of Construction Material:

No construction material will be removed from SITLA, Federal, or Tribal lands

If any gravel is used it will be obtained from a State approved gravel pit.

Pad construction material will be obtained from (if the material source is federally owned, a map will be included showing the location of the material):

All construction material will be purchased from private landowners and or from a commercial gravel/materials pit. All material will be trucked to location via third party trucking using only approved access roads.

The use of materials under BLM jurisdiction will conform to 43 CFR § 3610.2 3 of applicable.

7. Methods of Handling Waste Disposal:

Describe the methods and locations proposed for safe containment and disposal of waste material, e.g. cuttings, produced water, parlage, sewage, chemicals, etc.

The reserve pits will typically be jined with a synthetic material, ±20 mils in thickness. The reserve pits shall be located in cut material, with at least 50% of the pit volume being below triginal ground level. Three sides of the reserve pits will be fenced before drilling starts. The fourth side will be fenced as soon as drilling is completed, and shall remain until the pits are dry. Appropriate precautions, such as bird netting or bird balls and wildlife fencing will be used in order to prevent coess and mortality of birds and other wildlife or livestock.

Muds and cuttings will be solidified in place and buried. All precautions will be used as to minimize damage done to the pit liner while mixing is taking place.

Trash must be contained in a trash cage and hauled away to an approved disposal site as necessary but no later than at the completion of drilling operations.

Sewage from trailers and chemical portable toilets will be removed on a regular basis by a third party contractor and disposed of at an authorized sanitary waste facility.

No chemicals subject reporting under SARA Title III (hazardous materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completion of the well.

Any and all chemicals used during the drilling and completion of the well will be kept to a minimum and stored within the boundaries of the well pad. The third party chemical contractor will be responsible for containment and clean-up and removal of all spilled chemicals on location.

- 8. <u>Ancillary Facilities</u>: No ancillary facilities will be required during the drilling or completion of the well.
- 9. Well Site Layout -depict the pit, rig, cut and fill, topsoil, etc. on a plat with a scale of at least 1"=50'. See Exhibit "E".

During project construction, surface disturbance and vehicle travel shall be limited to the approved location and access routes. Any additional area needed must be approved by the State prior to use.

The operator will provide a trash cage for the collection and containment of all trash. The trash will be disposed in an authorized landfill. The location and access roads shall be kept litter free.

The pad has been staked at its maximum size; however it will be constructed smaller if possible, depending on rig availability. Should the layout change, this application will be amended and approved utilizing a sundry notice.

All surface disturbing activities, will be supervised by a qualified, responsible company representative who is aware of the terms and conditions of the APD and specifications in the approved plans.

Dust will be controlled during all phases of project implementation through the use of water or approved dust suppressants.

All cut and fill slopes will be such that stability and be maintained for the life of the activity.

Diversion ditches will be constructed as shown around the well site to prevent surface waters from entering the well site area.

The site surface will be graded to drain away from the pit to avoid pit spillage during large storm events.

Materials obtained from the construction of location, like topsoil and vegetation will be stock piled as indicated and permitted by the approved APD.

The topsoil will be stockpiled for reclamation in such a way as to prevent soil loss and contamination

Pits will remain fenced until site cleanup.

10. Plans for Restoration of the Surface: (Interim Reclamation and Final Reclamation)

Prior to disturbance, the topsoil will be separately removed and segregated from other materials. The topsoil depth will be decided by the State during the onsite. Topsoil will be segregated from subsoil without mixing them, based upon site specific conditions. Typically as specified by the approved APD.

Topsoil along the access road will be reserved in place adjacent to the road as indicted

Within 30-45 days after completion of well, all equipment that is not necessary for production shall be removed.

The reserve pit and that portion of the location not needed for production will be reclaimed in a given time period as specified by SITLA in the approved APD.

Before any dirt work to restore the location takes place, the reserve pit must be dry and

ready for burial. If necessary, any approvals needed to commence the burial operation will be obtained.

All road surfacing will be removed prior to the rehabilitation of roads, if necessary.

Reclaimed roads will have the berms and cuts reduced and will be closed to vehicle use.

All disturbed areas will be recontoured to replicate the natural slope.

The stockpiled topsoil will be evenly distributed over the disturbed area.

Prior to reseeding, all disturbed areas, including the access road will be scarified and left with a rough surface. All seed utilized will be tested prior to application to ensure SITLA specifications for PLS, purity, noxious weeds, etc. have been met.

The following seed mixture will be used: As specified in the conditions of approval.

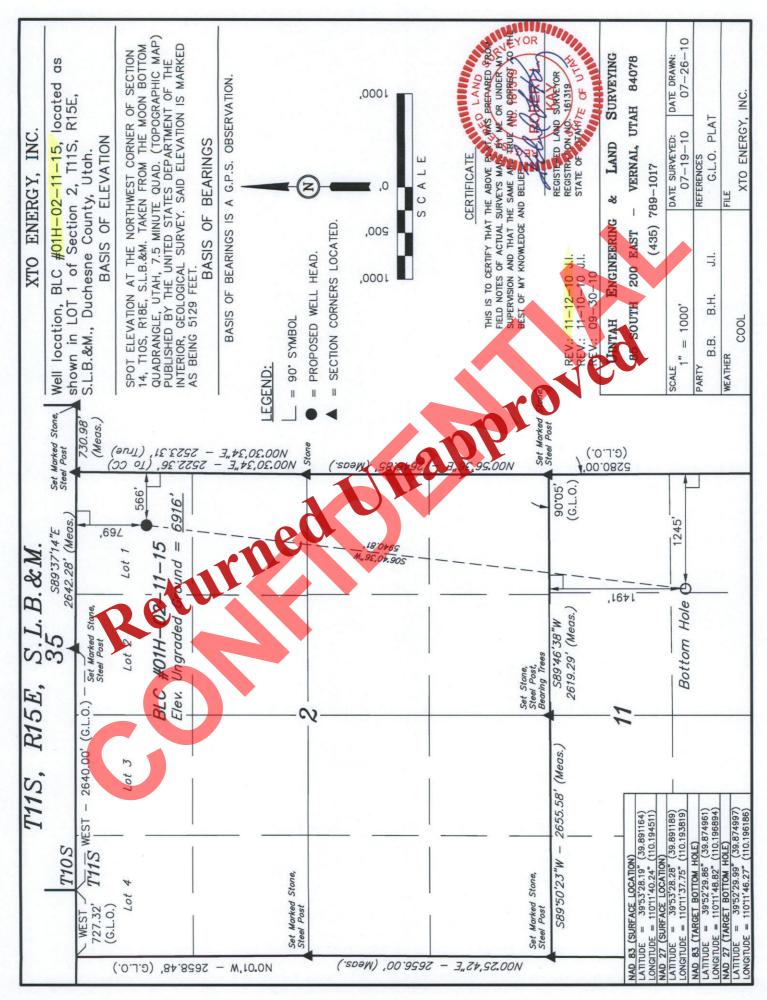
Prior to final abandonment of the site, all disturbed areas, including the access road, will be scarified and left with a rough surface. The site will then be seeded and/or planted as prescribed by SITLA

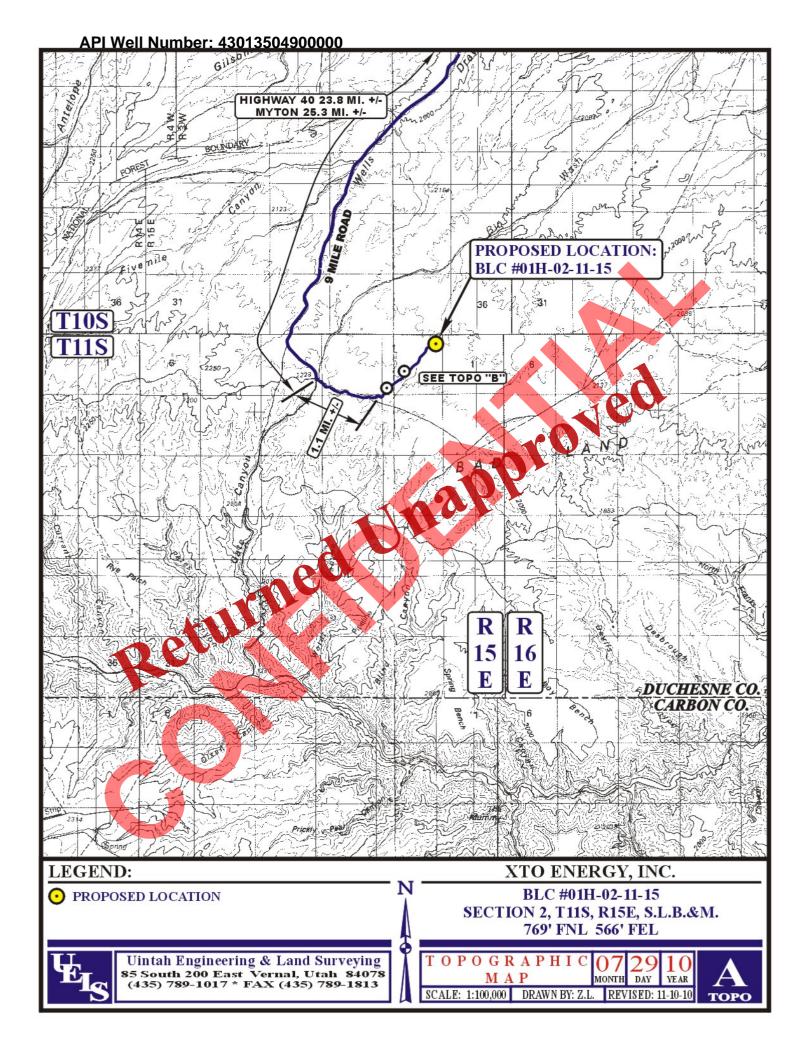
11. <u>Surface</u>: The surface is property of the State of Utah under management of the SITLA –State Office, 675 East 500 South, Suite 500, Salt Lare City, UT 84102-2818; 801-538-5100

Mineral: The minerals are property of the United States Federal Government and the State of Utah, and are managed by the Bure of Land Management and SITIA. Lease No. UTU-81703 (Sec. 11, 1113, R15E) and ML-51638 (Sec. 2, T115, R15E).

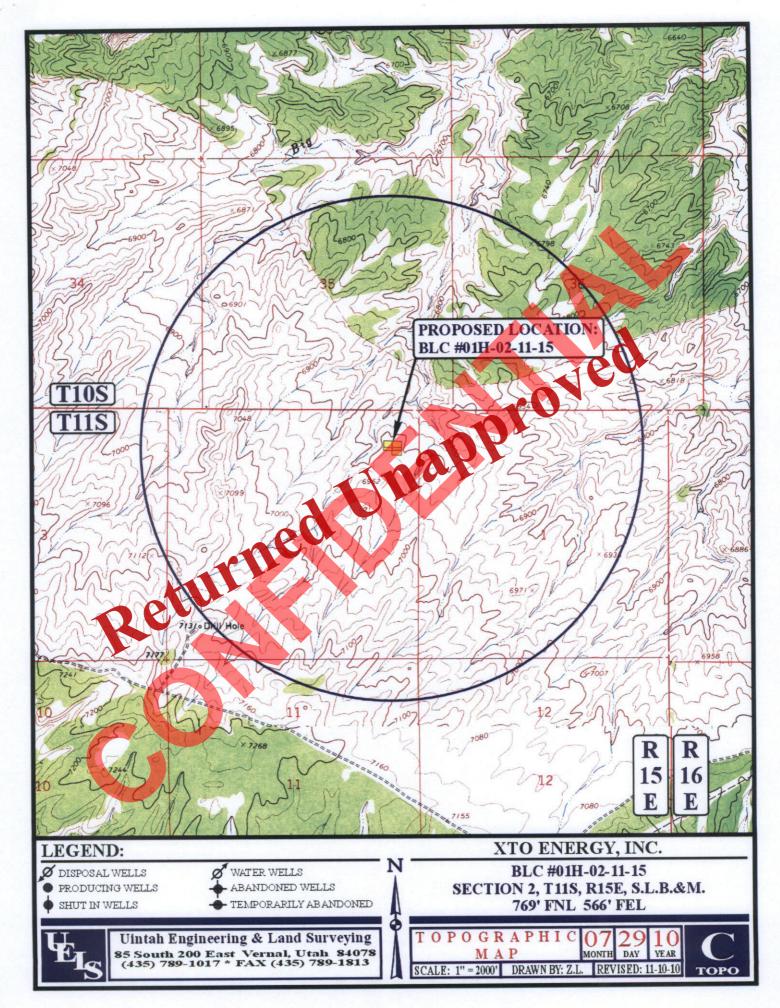
#### 12. Other Information:

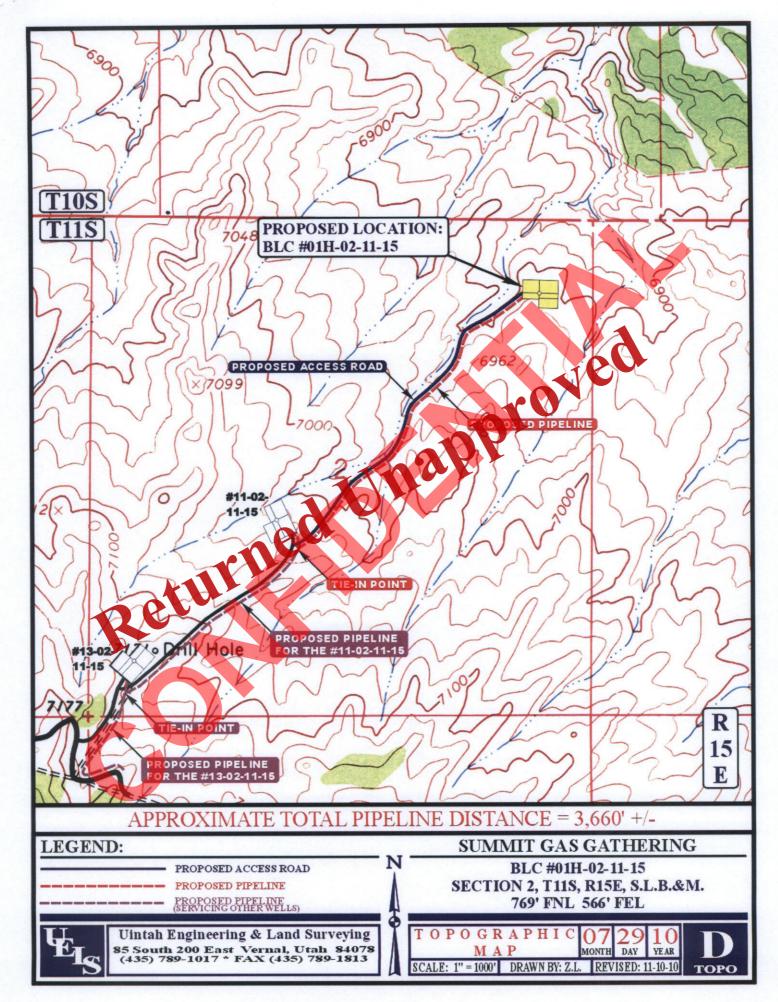
- a. SWCA has conducted a Class III archeological survey. A copy of the report will be submitted under separate cover to the appropriate agencies.
- SWCA has conducted a paleontological survey. A copy of the report will be submitted under separate cover to the appropriate agencies.
- c. No raptor habitat is known to exist within 1 mile of the proposed wellsite.

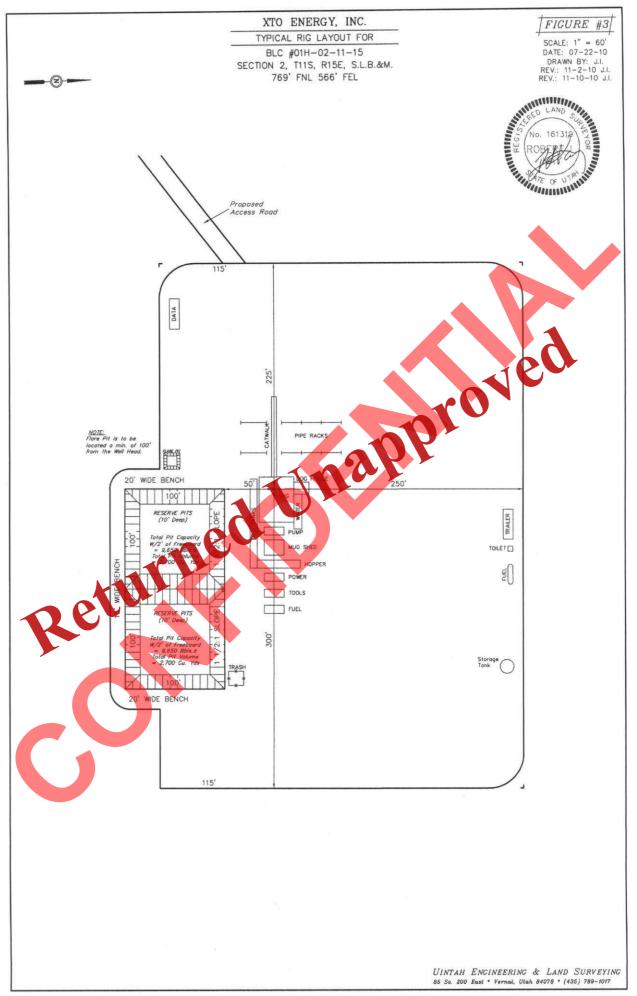












Received: November 19, 2010

# API Well Number: 43013504900000 FICURE #1 XTO ENERGY, INC. LOCATION LAYOUT FOR SCALE: 1" = 60' DATE: 07-22-10 DRAWN BY: J.I. REV: 09-30-10 REV: 11-2-10 J.I. BLC #01H-02-11-15 SECTION 2, T11S, R15E, S.L.B.&M. 769' FNL 566' FEL REV.: 11-10-10 J.I. MINING LAND SUBJECT ROPAGE OF UTHER 19 El. 894.7 F-11.8 8 El. 902.9 F-3.6 Approx. Top of Cut Slope C-11.4 \(\sigma\_{\text{S08'39'55'W}} \sigma\_{\text{56'12.82'}} \) (To Bottom Hole) 20' WIDE BENCH F-10.4 Sta. 3+00 C-21.9' Topsoil . Sto. 1+50 20 MDE BENCH El 904.6' F-1.9' El. 908.3 Round Corne as Needed 3 F-10.0 EI. 909.0 4 C-2.5 El. 896.5 Sta. 0+00 Approx. Toe of Fill Slope

Elev. Ungraded Ground At Lac. Stake = 6916.1'
FINISHED GRADE ELEV. AT LOC. STAKE = 6906.5'

UINTAH ENCINEERING & LAND SURVEYING 85 So. 200 East • Yermai, Utah 84078 • (435) 789-1017

## API Well Number: 43013504900000 XTO ENERGY, INC. FIGURE #2 TYPICAL CROSS SECTIONS FOR X-Section No. 161319 ROBERTAL BLC #01H-02-11-15 Scale SECTION 2, T11S, R15E, S.L.B.&M. 1" = 100' 769' FNL 566' FEL DATE: 07-22-10 DRAWN BY: J.I. REV.: 11-2-10 J.I. REV.: 11-10-10 J.I. 250 115 Finished Grade STA. 5+25 naore STA. 3+00 15' 250 Slope = $1 \frac{1}{2:1}$ (Typ.) STA. 1+50 115 Preconstruction STA. 0+00 Topsoil should not be Stripped Below Finished \* NOTE: FILL QUANTITY INCLUDES 5% FOR COMPACTION Grade on Substructure Area.

APPROXIMATE ACREAGES

APPROXIMATE YARDAGES

EXCESS MATERIAL

Fig. 10 Cu. Yds.

EXCESS MATERIAL

Fig. 10 Cu. Yds.

EXCESS MATERIAL

Fig. 10 Cu. Yds.

Fig. 10

Remaining Location = 28,140 Cu. Yds. (1/2 Pit Vol.)

TOTAL CUT = 32,550 CU.YDS. EXCESS UNBALANCE = 0 Cu. Yds.

FILL = 25,440 CU.YDS. (After Interim Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING 85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

# **XTO Energy**

Natural Buttes Wells(NAD83) BLC 01H-02-11#15 BLC 01H-02-11#15

horizontal

Plan: Lateral Wellbore

Standard Planning Report

13 November, 2010

Received: November 19, 2010

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## XTO Energy Inc.

Planning Report

EDM 2003.21 Single User Db Database:

Company:

XTO Energy

Project:

Natural Buttes Wells(NAD83)

BLC 01H-02-11#15 Site: Well: BLC 01H-02-11#15

Wellbore: horizontal Design: Lateral Wellbore **Local Co-ordinate Reference:** 

**TVD Reference:** MD Reference: North Reference:

**Survey Calculation Method:** 

Well BLC 01H-02-11#15

Rig KB @ 6935.0ft (Unit 109)

Rig KB @ 6935.0ft (Unit 109)

Minimum Curvature

Project Natural Buttes Wells(NAD83), Vernal, UT

Map System: Geo Datum:

US State Plane 1983 North American Datum 1983

Utah Northern Zone Map Zone:

System Datum:

Mean Sea Level

Using Well Reference Point

BLC 01H-02-11#15, Sec 2, T11S, R15E Site

Site Position: From:

Lat/Long **Position Uncertainty:** 

Northing: Easting: Slot Radius: 951,734.25 m 611,679.60 m Latitude: Longitude:

39° 53' 28.190 N 110° 11' 40.240 W **Grid Convergence:** 0.86°

Well BLC 01H-02-11#15, Horizontal Mancos

**Well Position** 

**Position Uncertainty** 

+N/-S 0.0 ft +E/-W 0.0 ft 0.0 ft

0.0 ft

Northing: Easting: Wellhead Elevation: 951,734.25 m 611,679.60 m 6,916.0 ft

Latitude: Longitude:

39° 53' 28.190 N 110° 11' 40.240 W 6,916.0 ft

Wellbore horizontal Dip Angle Magnetics **Model Name** Sample Date Declination

12/31/2009 IGRF200510

65.69

Field Strength (nT) 52.332

Design Lateral Wellbore **Audit Notes: PROTOTYPE** Version: Tie On Depth: 11,967.0 **Vertical Section:** +N/-S +E/-W Direction (ft) (ft) (°) 0.0 0.0 186.47

Plan Sections Measured			Vertical			Dogleg	Build	Turn		
Depth (ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)	TFO (°)	Target
11,967.0	0.00	0.00	11,967.0	0.0	0.0	0.00	0.00	0.00	0.00	
13,803.7	0.00	0.00	13,803.7	0.0	0.0	0.00	0.00	0.00	0.00	
15,387.0	95.00	186.47	14,755.0	-1,031.6	-116.9	6.00	6.00	0.00	186.47	
20,309.1	95.00	186.47	14,326.0	-5,903.7	-669.1	0.00	0.00	0.00	0.00	Proposed BHL Lat E

## XTO Energy Inc.

Planning Report

EDM 2003.21 Single User Db Database: Company:

XTO Energy

Natural Buttes Wells(NAD83)

Project: BLC 01H-02-11#15 Site: Well: BLC 01H-02-11#15 Wellbore: horizontal

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well BLC 01H-02-11#15 Rig KB @ 6935.0ft (Unit 109) Rig KB @ 6935.0ft (Unit 109)

Measured   Depth   Inclination   Azimuth   Vertical Depth   HN/S   HN/S   Section   Rate   C/100ft)   Rate   C/100ft   Rate	Design:	Lateral Wellbo	re							
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2,100.0         0.00         0.00         2,100.0         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00	1,900.0	0.00	0.00	1,900.0	0.0	0.0	0.0	0.00	0.00	0.00
2,100.0         0.00         0.00         2,200.0         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00	2.000.0	0.00	0.00	2.000.0	0.0	0.0	0.0	0.00	0.00	0.00
2,200.0         0.00         0.00         2,200.0         0.0         0.0         0.0         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00										
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2,400.0			4	2,300.0						
2,600.0			0.00							
2,600.0         0.00         2,600.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0 <t< td=""><td>2 500 0</td><td>0.00</td><td>000</td><td>2 500 0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.00</td><td>0.00</td><td>0.00</td></t<>	2 500 0	0.00	000	2 500 0	0.0	0.0	0.0	0.00	0.00	0.00
2,700.0         3.0         0.00         2,700.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0         0.0 <t< td=""><td></td><td>0.00</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>		0.00								
2,886 0         0.00         0.00         2,800.0         0.0         0.0         0.0         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00										
2,900.0         0.00         0.00         2,900.0         0.0         0.0         0.0         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00         0.00		0.00								
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4,100.0       0.00       0.00       4,100.0       0.0       0.0       0.0       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00	3,900.0	0.00	0.00	3,900.0	0.0	0.0	0.0	0.00	0.00	0.00
4,100.0       0.00       0.00       4,100.0       0.0       0.0       0.0       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00										
4,300.0       0.00       0.00       4,300.0       0.0       0.0       0.0       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00					0.0					
4,400.0       0.00       0.00       4,400.0       0.0       0.0       0.0       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00										
4,500.0       0.00       0.00       4,500.0       0.0       0.0       0.0       0.00       0.00       0.00         4,600.0       0.00       0.00       4,600.0       0.0       0.0       0.0       0.00       0.00       0.00         4,700.0       0.00       0.00       4,700.0       0.0       0.0       0.0       0.00       0.00       0.00										
4,600.0       0.00       0.00       4,600.0       0.0       0.0       0.0       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00	4,400.0	0.00	0.00	4,400.0	0.0	0.0	0.0	0.00	0.00	0.00
4,600.0       0.00       0.00       4,600.0       0.0       0.0       0.0       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00       0.00	4,500.0	0.00	0.00	4,500.0	0.0	0.0	0.0	0.00	0.00	0.00
4,700.0 0.00 0.00 4,700.0 0.0 0.0 0.0 0.00 0.00 0.00										
Anna Anna Anna Anna Anna Anna Anna Anna										
<b>4</b> ,800.0 0.00 0.00 <b>4</b> ,800.0 0.0 0.0 0.0 0.0 0.00 0.00 0.00	4,800.0	0.00	0.00	4,800.0	0.0	0.0	0.0	0.00	0.00	0.00
4,900.0 0.00 0.00 4,900.0 0.0 0.0 0.0 0.00 0.00 0.00	4,900.0	0.00	0.00	4,900.0	0.0	0.0	0.0	0.00	0.00	0.00
5,000.0 0.00 0.00 5,000.0 0.0 0.0 0.0 0.00 0.0	5 000 0	0.00	0.00	5 000 0	0.0	0.0	0.0	0.00	0.00	0.00
5,100.0 0.00 0.00 5,100.0 0.0 0.0 0.0 0.0 0.00 0.00 0.00										
5,200.0 0.00 0.00 5,200.0 0.0 0.0 0.0 0.0 0.00 0.00 0.00										
5,300.0 0.00 0.00 5,300.0 0.0 0.0 0.0 0.00 0.00 0.00										

## XTO Energy Inc.

Planning Report

EDM 2003.21 Single User Db Database:

XTO Energy

Company: Project: Natural Buttes Wells(NAD83) BLC 01H-02-11#15 Site:

Well: BLC 01H-02-11#15 Wellbore: horizontal Design: Lateral Wellbore

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well BLC 01H-02-11#15 Rig KB @ 6935.0ft (Unit 109)

Rig KB @ 6935.0ft (Unit 109)

anned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,400.0	0.00	0.00	5,400.0	0.0	0.0	0.0	0.00	0.00	0.00
5,500.0	0.00	0.00	5,500.0	0.0	0.0	0.0	0.00	0.00	0.00
5,600.0	0.00	0.00	5,600.0	0.0	0.0	0.0	0.00	0.00	0.00
5,700.0	0.00	0.00	5,700.0	0.0	0.0	0.0	0.00	0.00	0.00
5,800.0	0.00	0.00	5,800.0	0.0	0.0	0.0	0.00	0.00	0.00
5,900.0	0.00	0.00	5,900.0	0.0	0.0	0.0	0.00	0.00	0.00
6,000.0	0.00	0.00	6,000.0	0.0	0.0	0.0	0.00	0.00	0.00
6,100.0	0.00	0.00	6,100.0	0.0	0.0	0.0	0.00	0.00	0.00
6,200.0	0.00	0.00	6,200.0	0.0	0.0	0.0	0.00	0.00	0.00
6,300.0	0.00	0.00	6,300.0	0.0	0.0	0.0	0.00	0.00	0.00
6,400.0	0.00	0.00	6,400.0	0.0	0.0	0.0	0.00	0.00	0.00
6,500.0	0.00	0.00	6,500.0	0.0	0.0	0.0	0.00	0.00	0.00
6,600.0	0.00	0.00	6,600.0	0.0	0.0	0.0	9.00	0.00	0.00
6,700.0	0.00	0.00	6,700.0	0.0	0.0		0.00	0.00	0.00
6,800.0	0.00	0.00	6,800.0	0.0	0.0	0.0	0.00	0.00	0.00
6,900.0	0.00	0.00	6,900.0	0.0	0.0	0	0.00	0.00	0.00
						0.0			
7,000.0	0.00	0.00 0.00	7,000.0	0.0	0.0	0.0	0.00	0.00	0.00
7,100.0 7,200.0	0.00 0.00	0.00	7,100.0 7,200.0	0.0	0.0	0.0	0.00 0.00	0.00 0.00	0.00 0.00
7,200.0	0.00	0.00	7,300.0	0.0	0.0	0.0	0.00	0.00	0.00
7,400.0	0.00	0.00	7,400.0	0.0	0.0	0.0	0.00	0.00	0.00
			7,400.5						
7,500.0	0.00	0.00	7,500 0	0.0	0.0	0.0	0.00	0.00	0.00
7,600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
7,700.0	0.00	0.00	7,700.0	0.0	0.0	0.0	0.00	0.00	0.00
7,800.0	0.00	0.00	7,800.0	0.0	0.0	0.0	0.00	0.00	0.00
7,900.0	0,00	0.00	7,900.0	0.0	0.0	0.0	0.00	0.00	0.00
8,000.0	0.00	0.00	8,000.0	0.0	0.0	0.0	0.00	0.00	0.00
8,100.0	0.00	0.00	8,100.0	0.0	0.0	0.0	0.00	0.00	0.00
8,200.0	0.00	0.00	8,200.0	0.0	0.0	0.0	0.00	0.00	0.00
8,300.0	0.00	0.00	8,300.0	0.0	0.0	0.0	0.00	0.00	0.00
8,400.0	0.00	0.00	8,400.0	0.0	0.0	0.0	0.00	0.00	0.00
8,500.0	0.00	0.00	8,500.0	0.0	0.0	0.0	0.00	0.00	0.00
8,600.0	0.00	0.00	8,600.0	0.0	0.0	0.0	0.00	0.00	0.00
8,700.0	0.00	0.00	8,700.0	0.0	0.0	0.0	0.00	0.00	0.00
8,800.0	0.00	0.00	8,800.0	0.0	0.0	0.0	0.00	0.00	0.00
8,900.0	0.00	0.00	8,900.0	0.0	0.0	0.0	0.00	0.00	0.00
9,000.0	0.00	0.00	9,000.0	0.0	0.0	0.0	0.00	0.00	0.00
9,100,0	0.00	0.00	9,100.0	0.0	0.0	0.0	0.00	0.00	0.00
9, <mark>200</mark> .0	0.00	0.00	9,200.0	0.0	0.0	0.0	0.00	0.00	0.00
9,300.0	0.00	0.00	9,300.0	0.0	0.0	0.0	0.00	0.00	0.00
9,400.0	0.00	0.00	9,400.0	0.0	0.0	0.0	0.00	0.00	0.00
9,500.0	0.00	0.00	9,500.0	0.0	0.0	0.0	0.00	0.00	0.00
9,600.0	0.00	0.00	9,600.0	0.0	0.0	0.0	0.00	0.00	0.00
9,700.0	0.00	0.00	9,700.0	0.0	0.0	0.0	0.00	0.00	0.00
9,800.0	0.00	0.00	9,800.0	0.0	0.0	0.0	0.00	0.00	0.00
9,900.0	0.00	0.00	9,900.0	0.0	0.0	0.0	0.00	0.00	0.00
10,000.0	0.00	0.00	10,000.0	0.0	0.0	0.0	0.00	0.00	0.00
10,100.0	0.00	0.00	10,000.0	0.0	0.0	0.0	0.00	0.00	0.00
10,100.0	0.00	0.00	10,100.0	0.0	0.0	0.0	0.00	0.00	0.00
10,300.0	0.00	0.00	10,300.0	0.0	0.0	0.0	0.00	0.00	0.00
10,400.0	0.00	0.00	10,400.0	0.0	0.0	0.0	0.00	0.00	0.00
10,500.0 10,600.0	0.00 0.00	0.00 0.00	10,500.0 10,600.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00 0.00	0.00 0.00	0.00 0.00
	()()()	() ()()	10 600 0	0.0	(11)	()()	() ()()	(1 (1()	(1.111)

## **XTO Energy Inc.**

Planning Report

Database: Company: EDM 2003.21 Single User Db

XTO Energy

Project: Natural Buttes Wells(NAD83)
Site: BLC 01H-02-11#15

Well: BLC 01H-02-11#15
Wellbore: horizontal
Design: Lateral Wellbore

Local Co-ordinate Reference:

TVD Reference:
MD Reference:
North Reference:

**Survey Calculation Method:** 

Well BLC 01H-02-11#15

Rig KB @ 6935.0ft (Unit 109) Rig KB @ 6935.0ft (Unit 109)

True

igii.	Lateral Wellbur								
nned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
10,800.0 10,900.0	0.00 0.00	0.00 0.00	10,800.0 10,900.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00	0.00 0.00	0.00
11,000.0 11,100.0	0.00 0.00	0.00 0.00	11,000.0 11,100.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00	0.00	0.00 0.00
11,200.0	0.00	0.00	11,200.0	0.0	0.0	0.0	0.00	0.00	0.00
11,300.0	0.00	0.00	11,300.0	0.0	0.0	0.0	0.00	0.00	0.00
11,400.0	0.00	0.00	11,400.0	0.0	0.0	0.0	0.00	2.00	0.00
11,500.0	0.00	0.00	11,500.0	0.0	0.0	0.0	0.00	0.00	0.00
11,600.0	0.00	0.00	11,600.0	0.0	0.0	0.0	0.00	0.00	0.00
11,696.0	0.00	0.00	11,696.0	0.0	0.0	0.0	0.00	0.00	0.00
Castlegate	0.00	0.00	44 700 0				Casa	2.22	0.00
11,700.0 11,800.0	0.00 0.00	0.00 0.00	11,700.0 11,800.0	0.0 0.0	0.0	0.0	0.00	0.00 0.00	0.00 0.00
11,900.0	0.00	0.00	11,900.0	0.0	0.0	0.0	0.00	0.00	0.00
11,967.0 Blackhawk	0.00	0.00	11,967.0	0.0	0.0		0.00	0.00	0.00
12,000.0	0.00	0.00	12,000.0	0.0		0.0	0.00	0.00	0.00
12,100.0	0.00	0.00	12,100.0	0.0	0.0	0.0	0.00	0.00	0.00
12,200.0	0.00	0.00	12,200.0	0.0	0.0	0.0	0.00	0.00	0.00
12,300.0	0.00	0.00	12,300.0	0.0	0.0	0.0	0.00	0.00	0.00
12,400.0	0.00	0.00	12,400.0	0.0	0.0	0.0	0.00	0.00	0.00
12,500.0	0.00	0.00	12,500 0	0.0	0.0	0.0	0.00	0.00	0.00
12,600.0	0.00	0.00	2600.0	0.0	0.0	0.0	0.00	0.00	0.00
12,700.0	0.00	0.00	12,700.0	0.0	0.0	0.0	0.00	0.00	0.00
12,800.0 12,885.0	0.00	0.00	12,800.0 12,885.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00 0.00	0.00 0.00	0.00 0.00
Mancos									
12,900.0	0.00	0.00	12,900.0	0.0	0.0	0.0	0.00	0.00	0.00
12,977 0	0.00	0.00	12,977.0	0.0	0.0	0.0	0.00	0.00	0.00
Mancos B									
13,000.0	0.00	0.00	13,000.0	0.0	0.0	0.0	0.00	0.00	0.00
13,100.0	0.00	0.00	13,100.0	0.0	0.0	0.0	0.00	0.00	0.00
13,200.0	0.00	0.00	13,200.0	0.0	0.0	0.0	0.00	0.00	0.00
13,300.0	0.00	0.00	13,300.0	0.0	0.0	0.0	0.00	0.00	0.00
13,368.0	0.00	0.00	13,368.0	0.0	0.0	0.0	0.00	0.00	0.00
Mancos B B 13,400.0	0.00	0.00	13,400.0	0.0	0.0	0.0	0.00	0.00	0.00
13, <mark>500</mark> .0 13, <mark>600</mark> .0	0.00	0.00 0.00	13,500.0 13,600.0	0.0 0.0	0.0 0.0	0.0 0.0	0.00 0.00	0.00 0.00	0.00 0.00
13,700.0	0.00	0.00	13,700.0	0.0	0.0	0.0	0.00	0.00	0.00
13,803.7	0.00	0.00	13,803.7	0.0	0.0	0.0	0.00	0.00	0.00
13,850.0	2.78	186.47	13,850.0	-1.1	-0.1	1.1	6.00	6.00	0.00
13,900.0	5.78	186.47	13,899.8	-4.8	-0.5	4.9	6.00	6.00	0.00
13,950.0	8.78	186.47	13,949.4	-11.1	-1.3	11.2	6.00	6.00	0.00
14,000.0	11.78	186.47	13,998.6	-20.0	-2.3	20.1	6.00	6.00	0.00
14,050.0	14.78	186.47	14,047.3	-31.4	-3.6	31.6	6.00	6.00	0.00
14,100.0	17.78	186.47	14,095.3	-45.3	-5.1	45.6	6.00	6.00	0.00
14,150.0	20.78	186.47	14,142.5	-61.7	-7.0	62.1	6.00	6.00	0.00
14,200.0	23.78	186.47	14,188.7	-80.5	-9.1	81.1	6.00	6.00	0.00
14,250.0	26.78	186.47	14,233.9	-101.8	-11.5	102.4	6.00	6.00	0.00
14,300.0	29.78	186.47	14,278.0	-125.3 151.1	-14.2 17.1	126.1 152.1	6.00	6.00	0.00
14,350.0	32.78	186.47	14,320.7	-151.1	-17.1	152.1	6.00	6.00	0.00
14,400.0	35.78	186.47	14,362.0	-179.1	-20.3	180.2	6.00	6.00	0.00

## XTO Energy Inc.

Planning Report

Database: Company:

Site:

EDM 2003.21 Single User Db

XTO Energy

Project: Natural Buttes Wells(NAD83) BLC 01H-02-11#15

Well: BLC 01H-02-11#15 Wellbore: horizontal Design: Lateral Wellbore

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well BLC 01H-02-11#15 Rig KB @ 6935.0ft (Unit 109) Rig KB @ 6935.0ft (Unit 109)

JII.	Lateral Wellbo	), O							
ned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/1 <mark>00ft</mark> )	Turn Rate (°/100ft)
	38.78	186.47	14,401.8	-209.2			6.00	6.00	0.00
14,450.0 14,500.0	41.78	186.47	14,401.6	-209.2 -241.3	-23.7 -27.3	210.5 242.8	6.00	6.00	0.00
14,537.6	44.03	186.47	14,467.4	-241.3 -266.7	-30.2	268.4	6.00	6.00	0.00
		100.47	14,407.4	-200.7	-30.2	200.4	0.00	0.00	0.00
Target Zone		400.47	44.470.0	075.0	04.0	077.4	0.00	0.00	0.00
14,550.0	44.78	186.47	14,476.3	-275.3	-31.2	277.1	6.00	6.00	0.00
14,600.0	47.78	186.47	14,510.9	-311.2	-35.3	313.2	6.00	6.00	0.00
14,650.0	50.78	186.47	14,543.5	-348.9	-39.5	351.1	6.00	600	0.00
14,700.0	53.78	186.47	14,574.1	-388.2	-44.0	390.7	6.00	6.00	0.00
14,750.0	56.78	186.47	14,602.5	-429.0	-48.6	431.7	6.00	6,00	0.00
14,800.0	59.78	186.47	14,628.8	-471.3	-53.4	474.3	6.00	600	0.00
14,850.0	62.78	186.47	14,652.9	-514.8	-58.3	518.1	6.00	6.00	0.00
14,900.0	65.78	186.47	14,674.6	-559.6	-63.4	563.2	6.00	6.00	0.00
14,950.0	68.78	186.47	14,693.9	-605.4	-68.6	609.3	6.00	6.00	0.00
15,000.0	71.78	186.47	14,710.7	-652.2	-73.9	656.3	6.00	6.00	0.00
15,050.0	74.78	186.47	14,725.1	-699.7	-79.3	704.2	6.00	6.00	0.00
			14,737.0	-748.0		752.8	6.00	6.00	0.00
15,100.0 15,150.0	77.78 80.78	186.47 186.47	14,737.0 14,746.3	-748.0 -796 <b>.8</b>	5 8	801.9	6.00	6.00	0.00
15,200.0	83.78	186.47	14,753.0	-846.0		851.4	6.00	6.00	0.00
15,250.0	86.78	186.47	14,757.1	895.5	101.5	901.3	6.00	6.00	0.00
15,300.0	89.78	186.47	14,758.6	945.2	-107.1	951.2	6.00	6.00	0.00
15,350.0	92.78	186.47	14,757.5	-994.8	-112.8	1,001.2	6.00	6.00	0.00
15,387.0	95.00	186.47	14,755 0 14,763.9	-1,031.6	-116.9	1,038.2	6.00	6.00	0.00
15,400.0	95.00	186.47	4,753.9	-1,044.4	-118.4	1,051.1	0.00	0.00	0.00
15,500.0	95.00	186 47	14,745.1 14,736.4	-1,143.4	-129.6	1,150.7	0.00	0.00	0.00
15,600.0	95.00	486.47		-1,242.4	-140.8	1,250.3	0.00	0.00	0.00
15,700.0	95 00	186.47	14,727.7	-1,341.4	-152.0	1,349.9	0.00	0.00	0.00
15,800.0	95.00	186.47	14,719.0	-1,440.3	-163.2	1,449.6	0.00	0.00	0.00
15,900.0	95.00	186.47	14,710.3	-1,539.3	-174.5	1,549.2	0.00	0.00	0.00
16,000.0	95,00	186.47	14,701.6	-1,638.3	-185.7	1,648.8	0.00	0.00	0.00
16,100.	95.00	186.47	14,692.9	-1,737.3	-196.9	1,748.4	0.00	0.00	0.00
16,200.0	95.00	186.47	14,684.1	-1,836.3	-208.1	1,848.0	0.00	0.00	0.00
16,300.0	95.00	186.47	14,675.4	-1,935.3	-219.3	1,947.7	0.00	0.00	0.00
16,400.0	95.00	186.47	14,666.7	-2,034.3	-230.6	2,047.3	0.00	0.00	0.00
16,500.0	95.00	186.47	14,658.0	-2,133.2	-241.8	2,146.9	0.00	0.00	0.00
16,600.0	95.00	186.47	14,649.3	-2,232.2	-253.0	2,246.5	0.00	0.00	0.00
16,700.0	95.00	186.47	14,640.6	-2,331.2	-264.2	2,346.1	0.00	0.00	0.00
16,800.0	95.00	186.47	14,631.8	-2,430.2	-275.4	2,445.8	0.00	0.00	0.00
16,900.0	95.00	186.47	14,623.1	-2,529.2	-286.6	2,545.4	0.00	0.00	0.00
17,000.0	95.00	186.47	14,614.4	-2,628.2	-297.9	2,645.0	0.00	0.00	0.00
17, <mark>100.</mark> 0	95.00	186.47	14,605.7	-2,727.2	-309.1	2,744.6	0.00	0.00	0.00
17,200.0	95.00	186.47	14,597.0	-2,826.1	-320.3	2,844.2	0.00	0.00	0.00
17,200.0	95.00 95.00	186.47	14,597.0	-2,826.1 -2,925.1	-320.3 -331.5	2,844.2 2,943.9	0.00	0.00	0.00
17,300.0	95.00	186.47	14,566.5	-2,925.1 -3,024.1	-331.5 -342.7	2,943.9 3,043.5	0.00	0.00	0.00
17,500.0	95.00	186.47	14,579.5	-3,024.1	-354.0	3,143.1	0.00	0.00	0.00
17,600.0	95.00	186.47	14,562.1	-3,123.1	-365.2	3,242.7	0.00	0.00	0.00
17,700.0	95.00	186.47	14,553.4	-3,321.1	-376.4	3,342.3	0.00	0.00	0.00
17,800.0	95.00	186.47	14,544.7	-3,420.1	-387.6	3,441.9	0.00	0.00	0.00
17,900.0	95.00	186.47	14,536.0	-3,519.0	-398.8	3,541.6	0.00	0.00	0.00
18,000.0	95.00	186.47	14,527.3	-3,618.0	-410.0	3,641.2	0.00	0.00	0.00
18,100.0	95.00	186.47	14,518.5	-3,717.0	-421.3	3,740.8	0.00	0.00	0.00
18,200.0	95.00	186.47	14,509.8	-3,816.0	-432.5	3,840.4	0.00	0.00	0.00
18,300.0	95.00	186.47	14,501.1	-3,915.0	-443.7	3,940.0	0.00	0.00	0.00
18,400.0	95.00	186.47	14,492.4	-4,014.0	-454.9	4,039.7	0.00	0.00	0.00
18,500.0	95.00	186.47	14,483.7	-4,113.0	-466.1	4,139.3	0.00	0.00	0.00

## XTO Energy Inc.

Planning Report

Database: EDM 2003.21 Single User Db

Company: XTO Energy

Project: Natural Buttes Wells(NAD83)
Site: BLC 01H-02-11#15
Well: BLC 01H-02-11#15
Wellbore: horizontal
Design: Lateral Wellbore

Local Co-ordinate Reference: TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

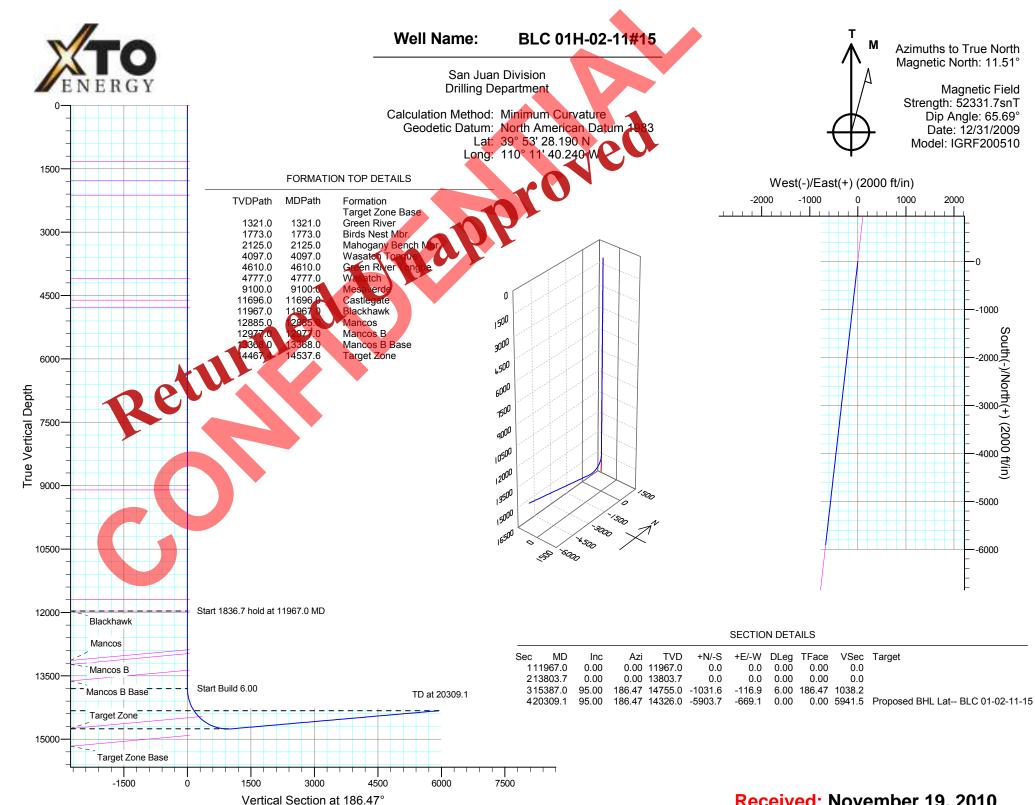
Well BLC 01H-02-11#15 Rig KB @ 6935.0ft (Unit 109) Rig KB @ 6935.0ft (Unit 109)

True

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
18,600.0	95.00	186.47	14,475.0	-4,211.9	-477.4	4,238.9	0.00	0.00	0.00
18,700.0	95.00	186.47	14,466.2	-4,310.9	-488.6	4,338.5	0.00	0.00	0.00
18,800.0	95.00	186.47	14,457.5	-4,409.9	-499.8	4,438.1	0.00	0.00	0.00
18,900.0	95.00	186.47	14,448.8	-4,508.9	-511.0	4,537.8	0.00	0.00	0.00
19,000.0	95.00	186.47	14,440.1	-4,607.9	-522.2	4,637.4	0.00	0.00	0.00
19,100.0	95.00	186.47	14,431.4	-4,706.9	-533.5	4,737.0	0.00	0.00	0.00
19,200.0	95.00	186.47	14,422.7	-4,805.9	-544.7	4,836.6	0.00	0.00	0.00
19,300.0	95.00	186.47	14,414.0	-4,904.8	-555.9	4,936.2	0.00	0.00	0.00
19,400.0	95.00	186.47	14,405.2	-5,003.8	-567.1	5,035.9	0.00	0.00	0.00
19,500.0	95.00	186.47	14,396.5	-5,102.8	-578.3	5,135.5	0.00	0.00	0.00
19,600.0	95.00	186.47	14,387.8	-5,201.8	-589.5	5,235.1	0.00	0.00	0.00
19,700.0	95.00	186.47	14,379.1	-5,300.8	-600.8	5,334.7	0.00	0.00	0.00
19,800.0	95.00	186.47	14,370.4	-5,399.8	-612.0	5,434.3	0.00	0.00	0.00
19,900.0	95.00	186.47	14,361.7	-5,498.8	-623.2	5,534.0	0.00	0.00	0.00
20,000.0	95.00	186.47	14,352.9	-5,597.7	-634.4	5,633.6	0.00	0.00	0.00
20,100.0	95.00	186.47	14,344.2	-5,696.7	-645.6	5,733.2	0.00	0.00	0.00
20,200.0	95.00	186.47	14,335.5	-5,795.7	-656,9	5,832.8	0.00	0.00	0.00
20,309.1	95.00	186.47	14,326.0	-5.903.7	-669.1	5,941.5	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir.	(i)	+N/-S (ft)	+E/-W (ft)	Northing (m)	Easting (m)	Latitude	Longitude
Proposed BHL Lat BLC - plan hits target - Point	0	0.00	14,326.0	-5,903.7	-669.1	949,931.93	611,502.72	39° 52' 29.860 N	110° 11' 48.820 W

Formations						
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
	1,321.0	1,321.0	Green River		0.00	
	1,773.0	1,773.0	Birds Nest Mbr.		0.00	
	2,125.0	2,125.0	Mahogany Bench Mbr.		0.00	
	4,097.0	4,097.0	Wasatch Tongue		0.00	
'	4,610.0	4,610.0	Green River Tongue		0.00	
	4,777.0	4,777.0	Wasatch		0.00	
	9,100.0	9,100.0	Mesaverde		0.00	
	11,696.0	11,696.0	Castlegate		0.00	
	11,967.0	11,967.0	Blackhawk		0.00	
	12,885.0	12,885.0	Mancos		-5.23	185.00
	12,977.0	12,977.0	Mancos B		-5.23	185.00
	13,368.0	13,368.0	Mancos B Base		-5.23	185.00
	14,537.6	14,492.0	Target Zone		-5.23	185.00
		14,916.0	Target Zone Base		-5.23	185.00



-1000

South(-)/North(+) (2000 ft/in)

--5000

-6000

## SURFACE USE PLAN

Name of Operator: XTO Energy Inc.

Address: 382 CR 3100

**Aztec, NM 87410** 

Well Location: BLC 01H-02-11-15

769' FNL & 566' FEL

Section 02, T11S, R15E, Duchesne County, Utah

#### Twelve Point Surface Use Plan

The surface owner or surface owner representative(s) and the dirt contractor will be provided with an approved copy of the surface use plan of operations and approved conditions of approval be previously initiating construction.

An on-site for this proposed location was conducted on December 2, 2010

#### 1. Existing Roads:

- a. The proposed access route to the location a should on the USGS quadrangle map: See Exhibit "A".
- b. The proposed well location is approximately 27.05 miles from Myton, Utah.
  - Location of the proposed well in relation to the closed town or other reference point: Proceed in a southwesterly direction from Myton, Utah, along U.S. Highway 40, approximately 1.5 miles to the junction of this road and the Sand Wash Road to the south. Furn left and proceed in a southerly, then southwesterly, then southerly direction for approximately 1.7 miles to the junction of this road and the 9 Mile Road to the southwest. Turn right and proceed in a southwesterly direction, approximately 23.6 miles to the junction of this road and an existing road to the southeast. Turn left and proceed in a southeasterly direction, approximately 1.1 miles to the beginning of the proposed access road for the proposed BLC #13-02-11-15 to the northeast. Follow the road flags in a northeasterly direction, approximately 0.15 miles to the beginning of the proposed access road for the BLC #11-02-11-15 to the northeast. Follow the road flags in a northeasterly direction, approximately 0.5 miles to the beginning of the proposed access road to the northeast. Follow the road flags in a northeasterly direction, approximately 0.7 miles to the proposed location.
  - All existing roads within one (1) mile of the proposed well site are shown on Exhibit "A". If necessary, all existing roads that will be used for access to the proposed well location will be maintained to their current conditions, or better, unless SITLA and/or BLM approval or consent is given to upgrade the existing road(s).
- e. The use of roads under State and County Road Department maintenance are necessary to access the Bad Lands Cliffs area. However, an encroachment permit is not anticipated since no upgrades to the State or County Road system are proposed at this time.

- All existing roads will be maintained and kept in good repair during all phases of the operation.
- g. Vehicle operators will obey posted speed restrictions and observe safe speeds commensurate with road and weather conditions.
- Since no improvements are anticipated to the State, County, Tribal or BLM access roads, no topsoil striping will occur.
- i. An off-lease Federal Right-of-Way may be required for a temporary access road and utility corridor segment that are outside the proposed Bad Lands Cliffs unit area.

## 2. Planned Access Roads:

- a. Location (centerline): Starting at from a point along an existing federal road in the NE/4 NE/4 of Section 10, T11S, R15E. The access road could cross one (1) significant drainage.
- b. Length of new access to be constructed: Approximately 6726 feet (1.27 miles) of new
  access will be constructed in order to gain safe access to the proposed well pad.
  Approximately 400 feet of this proposed access road will be on BLM surface.
- c. A road design plan is not anticipated at this time.
- d. The proposed access road will consist of a permanent 24' travel surface within a 55' disturbed width. If both the road and pipeline are capable are sharing the ROW, then only 65' of disturbed width would be the starty.
- e. BLM approval to construct and tilize 400' (see Exhibit "D1") of the proposed access road is requested with this application. The remained of the new construction will take place on SITLA administered ands.
- f. A maximum grace of 10% will be maintained throughout the project.
- g No turnouts are proposed since adequate site distance exists in all directions.
- Low water crossings or adequately sized culverts will be placed in low lying areas, as necessary, or as specified in the COA's of the approved APD.
- i. No surfacing material will come from federal or Indian lands.
- No gates or cattle guards are anticipated at this time.
- k. Surface disturbance and vehicular travel will be limited to the approved location access road.
- All access roads and surface disturbing activities will conform to the standards outlined in the Bureau of Land Management and Forest Service Publication: Surface Operating Standards and Guidelines for Oil and Gas Explorations and Development (Gold Book – Fourth Editions – Revised 2007).
- m. The operator will be responsible for all maintenance of the access road including drainage structures and culverts.
- n. Other: See general information below.

If any additional Right-of-Way is necessary, no surface disturbing activities shall take place on the subject Right-of-Way until the associate APD is approved. The holder will adhere to the conditions of approval in the Surface Use Program of the approved APD, relevant to any Right-of-Way facilities.

If a Right-of-Way is secured, boundary adjustments in the lease or until shall automatically amend this Right-of-Way to include that portion of the facility no longer contained within the lease or unit. In the event of an automatic amendment to this Right-of-Way, the prior on-lease/unit conditions of approval of this facility will not be affected even though they would now apply to facilities outside of the lease/unit as a result of a boundary adjustment. Rental fees, if appropriate shall be recalculated based on the conditions of this grant and the regulations in effect at the time of an automatic amendment.

If at any time the facilities located on public lands authorized by the terms of the lease are no longer included in the lease (due to a contraction in the unit or lease or unit boundary change) the BLM will process a change in authorization to the appropriate status. The authorizations will be subject to appropriate rental, or other financial obligations as determined by the BLM.

If the well is productive, the access road will be rehabilitated as needed and brought to Resource (Class III) Road Standards within a time period specified by the BLM. If upgraded, the access road must be maintained at these standards until the well is properly abandoned. If this time frame cannot be met, the Field manager, with be notified so that temporary drainage can be installed along the access road.

#### 3. Location of Existing Wells:

a. All wells within a doc ( ) rille radius are shown within Exhibit "C".

## 4. Location of Existing and/or Proposed Production Facilities:

- on-site facilities; typical on-site facilities will consist of a wellhead, flow lines (typically 3" dia.) artificial lifting system (if necessary), wellhead compression (if necessary), gas/oil/water separator (3 phase), gas measurement and water measurement equipment, and a heated enclosure/building for weather and environmental protection. The tank battery will typically be constructed and surrounded by a berm of sufficient capacity to contain 1½ times the storage capacity of the largest tank. The tanks that are typically necessary for the production of this well will be 1-300 bbl steel, above ground tank for oil/condensate and 1 300 bbl steel, above ground tank for production water. All loading lines and valves for these tanks will be placed inside the berm surrounding the tank battery.
  - All oil/condensate production and measurement shall conform to the provisions of 43 CFR 3162.7 and Onshore Oil and Gas Order No. 4, if applicable. Other on-site equipment and systems may include methanol injection and winter weather protection.
  - All permanent (in place for six (6) months or longer) structures constructed or
    installed on the well site location will be painted a flat, non-reflective color,
    matching the ground and not sky, slightly darker than the adjacent landscape,
    as specified in the COA's in the approved APD. All facilities will be painted
    within six (6) months of installation. Facilities required to comply with the
    Occupations Safety and Health Act (OSHA) may be excluded.



- Site security guidelines identified in 43 CFR 3163.7-5 and Onshore Oil and Gas Order No. 3 will be adhered to.
- b. There will not be any off-site facilities.
- c. The gas metering facility to be constructed and located on lease will be within 500 feet of the well head. All gas production and measurement shall comply with the provisions of 43 CFR 3162. 7-3, Onshore Oil and Gas Order No. 5, and America Gas Association (AGA) report No. 3.
- d. A tank battery will be constructed on this lease; it will be surrounded by a dike of sufficient capacity to contain the storage capacity of the largest tank. All loading lines and valves will be placed inside the berm surrounding the tank battery. All liquid hydrocarbon production and measurement shall conform to the provisions of 43 CFR 3162.7-3 and Onshore Oil and Gas Order No. 5 for natural gas production and measurement.
- e. Any necessary pits will be properly fenced and a bird net installed to prevent any wildlife, livestock or migratory bird entry.
- f. All access roads will be maintained as necessary to prevent erosion and accommodate year-round traffic. The roads will be maintained in a sair and useable manner.
- g. The site will require periodic maintenance to ensure that drainages are kept open and free of debris, ice, and snow, and that startages are properly treated to reduce erosion, fugitive dust, and impacts to a liacent areas.
- h. A pipeline corridor cor airing a single steel gas pipeline and a single steel or poly pipe water pipeline is a sociated with this application and is being applied for at this time. The proposed pipeline corridor will leave the southwest side of the well site and traverse approximately 16,726' (3.167 miles, paralleling the existing BLM road) south and then southeast ray to tie into an existing sales line in SE/4 SW/4 Section 12, T11S, R15E. See Exhibit "D1 & D2" for pipeline route.
- The new gas pipelines will be a 20" or less buried line and the water pipeline will be a 12" or less poly or flex (depending on pressures) water pipeline buried within a 45' wide disturbed pipeline corridor.
- Construction of the pipeline corridor will temporarily utilize the 30' disturbed width for the road for a total disturbed width of 75' for the road and pipeline corridors. The use of the proposed well site and access roads will facilitate the staging of the pipeline corridor construction.
- k. XTO Energy Inc. intends to bury the pipeline where possible and connect the pipeline together utilizing conventional welding technology.

#### 5. Location and Type of Water Supply:

- a. No water supply pipelines will be laid for this well.
- b. No water well will be drilled for this well.
- c. Drilling water for this well will be hauled on the road(s) shown in Exhibit "B".

- d. Water will be hauled from one of the following sources:
  - Water Permit # 43-1201, Section 21, T3S, R2W;
  - Water Permit # 43-3683, Section 25, T3S, R2W;
  - Water Permit # 43-3684, Section 25, T3S, R2W;
  - Water Permit # 43-467, Section 16, T1S, R4S.

#### 6. Source of Construction Material:

- a. The use of materials will conform to 43 CFR 3160.2-3.
- b. No construction materials will be removed from SITLA, Federal or Tribal Lands.
- c. If any gravel is used, it will be obtained from a state approved gravel pit.

### 7. Methods of Handling Waste:

- a. All wastes associated with this application will be contained and disposed of utilizing approved facilities.
- b. Drill cuttings will be contained and buried on site.
- c. The reserve pits will be located outboard of the location and along the southwest side of the pad.
- d. The reserve pit will be constructed so as not to leak, breach, or allow for any discharge.
- e. The reserve pit will be lined with a 20 mil minimum thickness plastic nylon reinforced liner material. The liner will overlay a feit liner pad only if rock is encountered during excavation. The pit liner will overlap the pit walls and be covered with dirt and/or rocks to hold it in place. No trash, scrap pipe, etc., that could puncture the liner will be disposed of in the pit walls will be sloped no greater than 2:1. A minimum of 2-foot of freeboard will be maintained in the pit at all times during the drilling and completion operations.
- B
- The reserve pit has been located in cut material. Three sides of the reserve pit will be fenced and have a bird net installed before drilling starts. The fourth side will be fenced as soon as drilling is completed, and shall remain until the pit is dry. After the reserve pit has dried, all areas not needed for production will be rehabilitated.
- g. No chemicals subject to reporting under SARA Title III (Hazardous Materials) in an amount greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completion of the well. Furthermore, no extremely hazardous substances, as defined in 49 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completion of the well.
- h. Trash will be contained in a trash cage and hauled away to an approved disposal site as necessary, but no later than at the completion of drilling operations. The contents of the trash container will be hauled off periodically to the approved Uintah County Landfill near Vernal, Utah.
- i. Produced fluids for the well other than water will be produced into a test tank until such time as construction of the production facilities is completed. Any spills, oil, gas, salt water, or other produced fluids will be properly cleaned up and removed from the location.

- j. After initial clean-up a 400 bbl tank will be installed to contain produced waste water. This water will be transported from the tank to an approved XTO Energy Inc. disposal well for proper disposal.
- k. Any salts and/or chemicals, which are an integral part of the drilling system, will be disposed of in the same manner as the drilling fluid.
- I. Sanitary facilities will be on site at all times during operations. Sewage will be placed in a portable chemical toilet and the toilet replaced periodically utilizing a licensed contractor to transport by truck the portable chemical toilet so that its contents can be delivered to the Vernal Wastewater Treatment Facility in accordance with state and county regulations.

## 8. Ancillary Facilities:

- a. Garbage Containers and Portable Toilets are the only ancillary facilities protosed in this application.
- b. No camps, airstrips or staging areas are proposed with this application.

## 9. Well Site Layout: (See Exhibit E)

- a. The well will be properly identified in accordance with 43 CFR 3162.6.
- b. Access to the well pad will be from the south, southwest.
- c. The pad and road design are consistent with BLM and SITLA specifications.
- d. A pre-construction meeting with responsible company representative(s), contractors, SITLA and the BLM will be conducted at the project site prior to commencement of surface disturbing activities. The pad and road will be construction-staked prior to this meeting.
- e. The pad has been staked at its maximum size; however, it will be constructed smaller if possible, depending upon rig availability. Should the layout change, this application will be amended and approved utilizing a sundry notice.
- f. All surface disturbing activities, will be supervised by a qualified, responsible company representative who is aware of the terms and conditions of the APD and specifications in the approved plan.
- g. All cut and fill slopes will be such that stability can be maintained for the life of the activity.
- Diversion ditches will be constructed and BMP's installed, as shown, around the well site to prevent surface water from entering the well site area.
- i. The site surface will be graded to drain away from the pit to avoid pit spillage or breach during large storm events.
- j. The stockpiled topsoil (first 6 inches or maximum available) will be stored in a windrow on the uphill side of the location to prevent any possible contamination or degradation. All topsoil will be stockpiled for reclamation in such a way to prevent soil loss and contamination.

- k. Pits will remain fenced and bird netted until site cleanup.
- I. The blooie line will be located at least 100 feet from the wellhead.
- m. Water injection may be implemented, if necessary, to minimize the amount of fugitive dust.

## 10. Plans for Surface Restoration (Interim Reclamation and Final Reclamation):

- a. Site reclamation for a producing well will be accomplished for portions of the site not required for the continued operations of the well.
- b. Upon well completion, any hydrocarbons in the pit shall be removed in accordance with 43 CFR 3162.7-1. Once the reserve pit is dry, the plastic nylon reinforced liner will be torn and perforated before the backfilling of the reserve pit. The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximate natural contours.
- c. Following the BLM published Best Management Practices and per the signed 2009 Reclamation Plan, the interim reclamation will be completed within 30 days after completion, or 120 days from well spud, weather permitting to re-establish vegetation, reduce dust and erosion, and compliment the visual resources of the area.
  - All equipment and debris will be removed from the area proposed for interim reclamation and the pit area will be backfilled and recontoured to match the surrounding topography.
  - The area outside the rigidal hars and other disturbed areas not needed for the operation of the well will be econtoured to blend in with the surrounding topography and reserved, utilizing and approved seed mix and PLS rate.
  - Reclamation areas receiving incidental disturbance during the life of the producing well will be recontoured and reseeded as soon as practical.
- d. The operator will control noxious weeds along access road use authorizations, pipelines route authorizations, well sites, or other applicable facilities (as per 2009 Reclamation Plan) by spraying or mechanical removal. Noxious weed surveys have been completed with the required NEPA surveys.
- e. Prior to final abandonment of the site, all disturbed areas, including the access roads, will be scarified and left with a rough, natural looking surface. The sire will then be seeded and/or planted as prescribed within the COA's.

#### 11. Surface and Mineral Ownership:

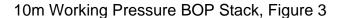
- a. Surface Ownership: The surface is property of The State of Utah under management of SITLA State Office, 675 East 500 South, Suite 500, Salt Lake City, Utah 84102-2818; 801.538.5100.
- b. Mineral Ownership: The minerals are property of the United States Federal Government and the State of Utah, and are managed by the Bureau of Land Management and SITLA. Lease No. UTU-81703 (Sec. 11, T11S, R15E) and ML-51638 (Sec. 2, T11S, R15E).

## 12. Other Information:

- a. SWCA Environmental Consultants have conducted a Class III archeological survey. A copy of the report will be submitted under separate cover to the appropriate agencies.
- b. SWCA Environmental Consultants have conducted a paleontological survey. A copy of the report will be submitted under separate cover to the appropriate agencies.
- c. SWCA Environmental Consultants have conducted a biological and a noxious weed survey. A copy of these reports will be submitted under separate cover to the appropriate agencies.
- d. No raptor habitat is known to exist within one (1) mile of the proposed wellsite.

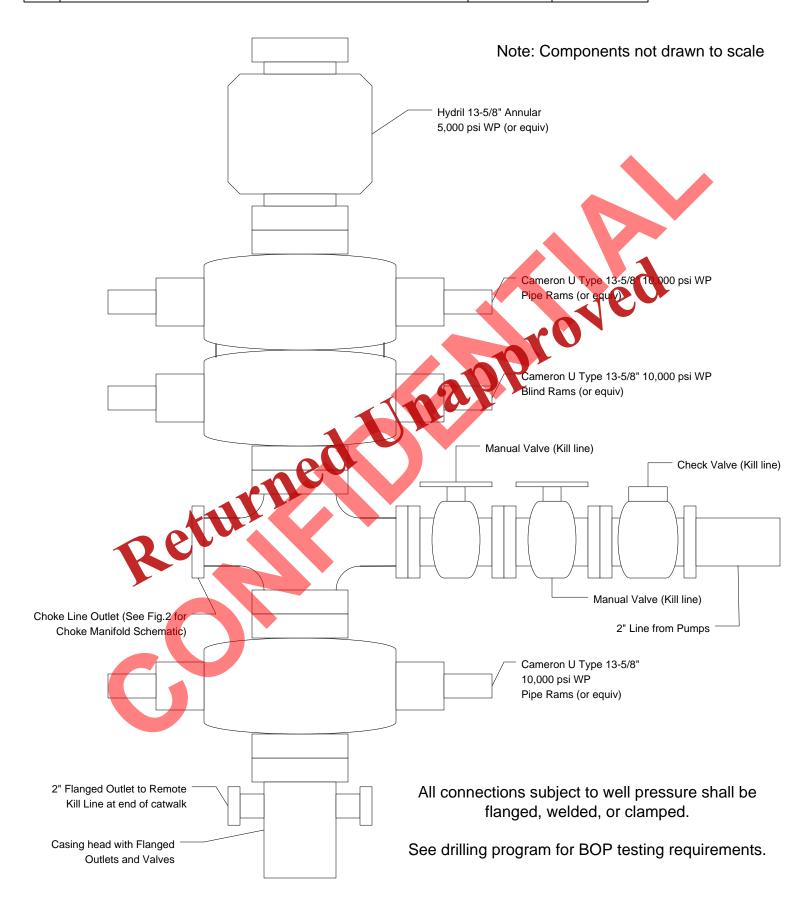


## **XTO Energy, Inc**



11/8/2010 | Rig- Undesgn



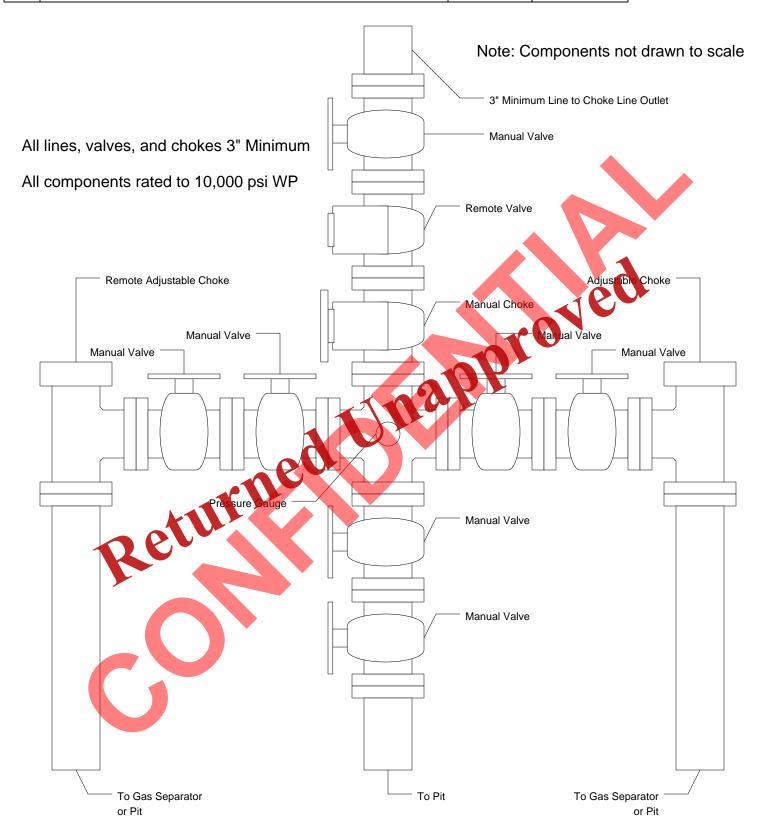


## **XTO Energy, Inc**

10m Working Pressure Choke Manifold, Figure 4

11/8/2010 | Rig Undesgn





All connections subject to well pressure shall be flanged, welded, or clamped.

See drilling program for BOP testing requirements.

Received: November 19, 2010

## Operator Certification:

a. Permitting and Compliance:

Krista Wilson Permitting Tech. XTO Energy Inc. 382 CR 3100 Aztec NM 87410 505-333-3100

b. Drilling and Completions:

Brent Martin XTO Energy Inc. 382 CR 3100 Aztec, NM 87410 505-333-3100

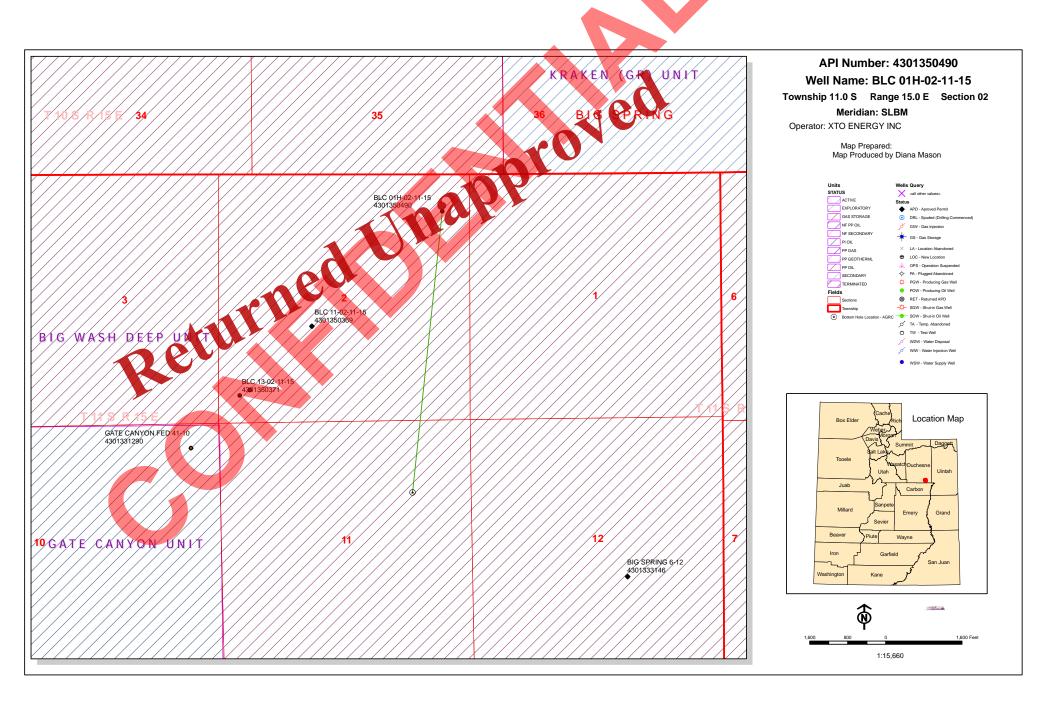
c. Certification:

I hereby certify that I of so neone under my direct supervision, have inspected the drill she and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and federal laws applicable to this operation; that the statements in de in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or XTO Energy Inc., are responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

Executed this 19th day of November, 2010.

Krista Wilson

Signature





## State of Utah

### DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

November 26, 2012

XTO ENERGY INC PO Box 6501 Englewood, CO 80155

Re: Application for Permit to Drill - DUCHESNE County, Utah

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the BLC 01H-02-11-15 well, API 43013504900000 that was submitted November 19, 2010 is being returned unapproved. If you plan on drilling this well in the future, you must first submit a new application.

Should you have any questions regarding this matter, please call me at (801) 538-5312.

Sincerely,

Diana Mason Environmental Scientist

Enclosure

cc: Bureau of Land Management, Vernal, Utah





## **United States Department of the Interior**

## **BUREAU OF LAND MANAGEMENT**

Green River District Vernal Field Office 170 South 500 East Vernal, UT 84078

http://www.blm.gov/ut/st/en/fo/vernal.html





Malia Villers XTO Energy, Inc. PO Box 6501 Englewood, CO 80155

43 013 50490

Dear Ms. Villers:

The following Applications for Permit to Drill (APD) are being returned unapproved per your request to this office in an email message to Natural Resource Specialist David Gordon received on April 16, 2015 from Kelly Kardos. If you intend to drill at any of these locations at a future date, a new APD must be submitted.

Lease	Well	Aliquot	Sec., T., R.	Date Rec'd
UTU-76265	LCU 7-17H	SWNE	Sec. 17, T11S-R20E	10/20/2005
UTU-81703	BLC 01H-02-11-15	Lot 1	Sec. 02-T11S-R15E	12/22/2010

If you have any questions regarding APD processing, please contact Robin R. Hansen at (435) 781-3428.

Sincerely,

RECEIVED

/s/ Jerry Kenczka

MAY 04 2015

Jerry Kenczka

Assistant Field Manager DIV OF OIL GAS & MINING

Lands & Resource Minerals

**Enclosures** 

CC:

**UDOGM** 

bcc:

Well File